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ARTICLE XVII.

REPORT ON THE HISTORY OF MEDICINE.

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Read to the Esculapian Society, at the Meeting held at Paris, Ill., May, 1866.

The practice of medicine implies the application of science to the cure of diseases and to their prevention; while that of surgery, one of its branches, relates to a similar application to the accidents of the human body and all that class of diseases requiring the use of the knife, or those more purely objective—fractures, dislocations, ulcers, etc. This is our understanding at the present time, and has been since the increase of knowledge entitled it to a science. But, in the early ages of the human family, it could not claim this rank; and whatever medicinal agents were then used were merely from experience, as not even the virtues of the simplest herb or plant could have been known in any other way.

It is evident that in all ages agents of one kind or another have been used for the relief of those afflicted from bodily disease or injury, and that some would give more attention to it than others, and would gradually become the doctors or prescribers of medicine; and, as the human mind loves mystery, they made up in their agents what they lacked in knowledge—and the doctor and all he knew was a bundle of unfathomable

mystery. In the mysterious department we have not changed, as this class is as much sought after now as ever before, and spiritual and magical doctors have a lengthened train of followers, who believe everything they cannot see, and nothing which they can.

They avoid the *quod erat demonstrandum*, and hug to their foolish bosoms the *non est demonstrandum*.

But to this small beginning, one fact has been added to another, one demonstration to another, until a vast structure has been raised up, now almost perfect, to illuminate the world and gladden the human heart. From the depths of the ocean, a tiny insect has built up in increasing labor vast reefs of coral, each brief age having its increase, giving monuments exceeding those of man. The flowing and the ebbing billows of the sea have thrown up, sand by sand, islands which have become the abode of man. Three thousand years ago, and more, the shapeless mass of medicine began to assume form. Ages anterior to that, in Egypt and China, it was practiced as an art; and when the inhabitants of Greece were but savages, living in caves and upon acorns, Phœnicia boasted of her Tyre and the arts of civilization, and the banks of the Nile gave to Athens her foundation, and name, and the arts and sciences, and Thebes sprang up from her no less civilized neighbors, the Phœnicians. From revolutions, came this new world, so long the seat of empire in art and science, and all that was great and commanding.

Æsculapius, whether mythical or real, was the representative of the art of medicine, became a god, to whom temples were erected and in which he was worshipped. The serpent and the cock were second to him—and these figures are still emblems of our art. He lived before the Trojan war; was said to have been the son of Apollo; accompanied the Argonautic expedition, as their physician; and was greatly skilled in the power of medical plants. His knowledge led to his death, for Plato complained that he restored so many to life, that this god (of the infernal regions) had nothing to do, and Æsculapius was killed by Jupiter by a thunderbolt, the forger of which, Cy-

clops, was killed by the incensed father, Apollo. This gives the highest evidence of his skill, and is the only instance known where the grave has made this complaint. Unlike our great father, we shall have the credit of giving to the grave all that is due.

Human skill has bounds, and life a termination, but to us belongs the duty of giving length to that which might be short, and ease to that which might be painful; and thus far our profession excels all others. It is as much superior to that of law, as human life is of more value than property. Voltaire says, that a good physician is far above the grand of the world, and kindred to divinity.

Machaon and Podalirius, sons of Æsculapius, accompanied the Greeks to the Trojan war, as physicians. The former was a skilful surgeon, and devoted his time to the dressing of wounds. The latter was invited to stay a pestilence in the Grecian camp, which had baffled the skill of others. On his return from the war, being shipwrecked, he cured the king's daughter, who had fallen from the house and was insensible, by bleeding her. This is the first recorded case of bleeding being applied to one stunned by a fall. Having cured her, he married her. Philoctetes was cured of a wound of the foot, by Machaon, and in a manner which would not be discreditable to the surgery of this age. He was placed in a bath and cast into a deep sleep, when the putrified flesh was cut out, was washed with wine, and herbs applied, by which the parts were healed and the hero restored to health. The statement of this fact is evidence of respectable surgical knowledge—precisely what would now be done, in a similar case, by every gentleman of this Society.

Pindar states, that Æsculapius cured ulcers, wounds, fevers, etc., by enchantments, calming potions, incisions, and by external applications. This was pretty good eclectic practice, and rather better than that adopted by the mendicant tribe of the present day. It certainly compared favorably with the charms used by the people of Devonshire, England, 150 years ago. Their infallible remedy for sciatica, called "bone shave,"

was this:—The patient must lie on his back, on the bank of a river or brook, with a straight staff by his side, and must have the following words repeated over him:—

“Bone shave right,

“Bone shave straight.

“As the water runs by the stave,

“Good for bone shave.”

In the name of the patient repeated.

The interval between the two methods is nearly 2000 years, and the former, I think, has the preference. Instinct and experience go hand in hand in the beginning of the healing art. Instinct would lead the feverish to quench thirst with cooling drinks; one with ague, to get warm by fire and covering; to reject food when the stomach would not receive it. And experience would reëmploy those remedies which had been found efficacious. These fragments were gathered up in the primitive age, and went far towards the development of system.

After the death of Æsculapius, and he had become deified and temples had been erected to his memory, the medical art passed into the hands of the priests of these temples, who were called Æsculapiades. They purged, and bled, and vomited, and paid great attention to hygiene. Everything was involved in mystery, and nothing pertaining to the plans was revealed. It was a sacred and secret society, but knowledge was taught to those who desired to become priests. This age continued for nearly 700 years, when the secrecy was broken through and a new and enlightened age came, which was denominated the Philosophic Age. The Æsculapiades still continued to practice and teach medicine in the temples, but the pupils of Pythoras and of the Gymnasia went out and practiced, going from house to house, and city to city. The veil of secrecy was removed, and in the philosophic age a more enlightened and substantial foundation was laid. There were public discussions and teachings. This age continued about 200 years, and until the establishment of the Alexandrian library, 320 years before Christ. In this age lived Hippocrates, who wrote extensively upon everything pertaining to medicine, then known. His

writings are frequently referred to at the present day, and exhibit the character of a student and philosopher, and a great advancement in medicine over the preceding ages. His doctrines and teachings were founded upon interpretation of the most abstruse subjects, and no facts or doctrines were announced without a reason, no matter how absurd. He had some knowledge of anatomy, physiology, and pathology, and has exercised a greater influence in medicine than any man that has ever lived since or had before. His school at Cos, acquired great reputation, and although the prejudice of the age in which he lived, forbade dissection of the human body, he obtained, from the dissection of animals, a general idea of anatomy, which enabled him to elucidate many of the doctrines he advocated. His doctrine of coction and vital forces, and of critical days or crisis in disease founded upon that, has undergone but few changes, and has received the sanction of the profession to a certain extent, since his time, now more than two thousand years. Whether false or true, it is a widely obtained belief that the vital forces are expended, or become dominant, and lead to life or death on certain days—on the 7th, 14th, 21st, or other days. It is a doctrine which has been taught all of us. It is a doctrine of truth and of nature, for whatever has life, terminates in death, and if three-score years and ten expends the vital forces unaided by disease, and lead to death, the presence of disease may expend them in a few hours, or days, or when the contest between the two are more equally balanced, it seems reasonable that a certain or fixed time will give dominance to one or the other. All experience teaches this. The eruptive diseases are clearly obedient to this law; and while I do not give credence to all that is said of critical days, I yield a belief to the principle, for it is a seal of God impressed upon all living matter. Some now before me have been born since one of the requirements in the medical schools of France was to understand the aphorisms of Hippocrates, and no man can understand them without being enlightened in his profession. To him and his family the science of medicine owes much of its success and usefulness.

His published works astonished the world, and made the physical science of man among the most important branches of philosophy. He was great and renowned in his own age, and the habit of calling medicine the art of Æsculapius was gradually lost, and the learned more frequently spoke of it as the science of Hippocrates. So popular did he make the study of medicine that no man was esteemed learned without it; and Plato and Aristotle were not only philosophers, but were eminent physicians and naturalists. The latter founded the first known museum of natural history upon earth. He was the protege of Philip, of Macedonia, the most enlightened and munificent of Kings, and when he selected the philosopher and physician as preceptor to his son, Alexander, he sent him, from his camps in Asia, the rarest of animals and plants to enrich the museum. How great this age of heroes, of philosophers, of statesmen, and of physicians! It was an age of thought, of reason, and of contest of mind, and rises sublimely beautiful above the grosser eras of succeeding ages. From the pupil and philosopher, Alexander rapidly became the king and conquerer, and in all his rapid strides to monarch of the earth, never forgot what was due to the advancement of science, and shortly after his death, a new era dawned upon the world, which to the ancients had a similar influence to the discovery of printing to the moderns. It was the formation of two great libraries—that of Pergamos and Alexandria—the former containing two hundred thousand volumes, and the latter six hundred thousand. These were accessible to all who sought their accumulated richness, and has conferred immortality on their founders. Their manuscripts were upon Egyptian papyrus, but a rivalry between them interdicted the exportation of the papyrus from Egypt to Pergamos, and the latter invented the parchment which has since been so extensively used, and upon which our diplomas of the present day are written. Technical or classical name of which is *charta pergamia*. When the beautiful Cleopatria had conquered Pergamos, she transferred its library to Alexandria, which for a thousand years continued the seat of learning. This great metropolis of

medical science, and its medical schools, were to the ancients what the Paris schools are to the moderns. It was here that the Hebrew savans were charged by Philadelphus with the translation of the Bible into Greek, which has been so highly esteemed ever since, and is called the Septuagint. It was from the banks of the Nile that science and learning went to Greece, and the fire of genius died out at its fountain, when its brilliant light illuminated Attica and the world. After long ages its smouldering spark was again kindled in Egypt, which gave to Alexandria a name and rank which long survived the destruction of the kingdom in which it was located. It was here that anatomy was first taught by dissection. It was the great school of medicine for the world. It was here that Galen, a native of Pergamos, and the great physician of Rome studied. Criminals, who were executed, were given for dissection, and prejudice yielded to reason. The Ptolemies were its patrons, and its name was respected and honored in the uttermost ends of the earth. For four hundred years anatomy was taught in this school, and it may be inferred that it gave an immense impetus to medicine. In fact, the practice of that day was about as it was thirty years ago in this country. Bleeding, purging, and sweating were boldly used, and diseases were classified into internal, external, acute, and chronic. The treatment was divided into hygienic, pharmaceutic, and surgical. They gave great attention to symptoms, and were remarkably exact in prognosis. Various sects arose at different periods of the Alexandrian school, which gave rise to discussions and the general improvement of medicine; but all, in reality, were based upon the Hippocratic doctrine, which consisted in employing such curative means as would be contrary to the generative cause of disease, or to the primitive and essential, to which all the other symptoms are connected. When Alexandria fell under the Roman dominion, its schools of medicine lost their character; for anatomy could no longer withstand the Roman respect and prejudice for the dead, and about the second century of the Christian era its dissecting rooms were closed.

Hospitals were established about the fourth century, and the first in that holy city where our Savior was crucified, and by a Christian female from Rome. From that to this day, their holy blessings have been felt throughout the Christian world, and the maimed, and the halt, and the blind, have found within their sacred walls a holy rest of peace, which but for Christianity, which but for medicine, and for the charity of woman's heart, would have been forever shut out. But, in the destruction of the Alexandrian library, in the sixth century, passed away the glory of accumulated ages. For eighteen hundred years it was the great commercial city of the earth. But only for a thousand years from its foundation to its capture by the Saracens was it great in letters. With that event passed away its schools of philosophy, medicine, theology, and astronomy. The glory and empire of Greece and Rome had passed into the hands of the infidel, who, in their turn, contributed largely to the cultivation and spread of science and letters, and from the tenth to the thirteenth centuries, during Moorish rule in Spain, its schools at Cordova, Toledo, and Seville, were the resort of all Europe for instruction. They especially cultivated medicine, and had a school of celebrity at Bagdad, where Rhazes gave lectures, and whose name we see frequently quoted in modern works, especially in eruptive diseases. We can readily judge how justly great he is reputed, from a few sentences he has left us on the selection of a physician, and which is worthy of being understood by all: "Study carefully the antecedents of the man to whose care you propose confiding all you hold most dear upon earth; that is to say, your health, your life, and the health and lives of your wife and children. If the man is dissipating his time in frivolous pleasures; if he cultivates, with too much zeal, the arts that are foreign to his profession, such as music and poetry; still more, if he is addicted to wine and debauchery, refrain from committing into such hands a trust so precious. He merits your confidence who, having early applied himself to the study of medicine, has sought skilful instructors, and seen much disease; who has united to the assiduous reading of good authors

his personal observations, for it is impossible to see everything and try everything in one's own practice, and the knowledge and experience of a single individual compared to the knowledge and skill of all men of all ages, resembles a slender brook of water that flows by the side of a great river." The Arabian physicians made improvements in pathology and therapeutics. They were the first to distinguish eruptive fevers by the external character of the eruption, variola and varicella. They introduced mild purgatives, such as cassia senna and manna, which happily took the place of the more drastic of the ancients. They also gave us the confection of syrups, of distilled waters, of tinctures, and compounded many new ointments, pomades, and plasters, for external applications.

A little further on, and during the middle ages, when the northern hords had swept away the civilization of the world, and had destroyed empires, kingdoms, and cities, medicine again fell into the hands of the priesthood, and continued until it was so abused that the Pope interdicted the practice of the art in about the thirteenth century. For four centuries prior to that, the healing art was monopolized by the Jews and priests, and but little advancement was made, as may be inferred from the receipt of a priest, sold for the preparation of green frogs for medicinal use. It was a secret compound, and the vendor boasted of the large price he obtained for it. The priests and Jews stood at the head of the profession, but others of a lower order divided the profits with them. Such creatures as barbers, bath-tenders, and old women; especially did the barbers take under their charge minor operative surgery. The result of this condition in medicine so lowered it in the estimation of those having authority, that they began to make exactions of knowledge upon those who practiced the profession. Medical colleges again came into repute, and were founded at various points throughout Europe. That of Salerno, in Sicily, obtained great reputation. But its epoch of greatest splendor was about the tenth century, when the crusaders of Christian Europe were rushing to the Holy Land. Being located on this great pathway of travel, gave it advantages of giving

aid to the sick and wounded which others less favorably situated did not possess, and its healthy and delicious climate made it a desirable resort for kings and knights, and barons, in their crusades. In fact, its reputation drew from all parts of Europe those afflicted with diseases and wounds difficult of cure. The son of William the Conqueror, was treated there for a wound on his return from the crusade. Its faculty issued edicts for the preservation of health, which were sought after and respected by crowned heads. To the king of England they wrote: "If you wish good health, banish despondency and avoid anger. Drink but little wine, eat light suppers, and do not disdain to take some exercise after meals. Do not sleep during the day; (do not retain too long the urine and evacuations from the bowels.) By observing these precepts your life will be prolonged." I quote this to show you the character of this faculty, and that their advice could not be much improved upon in this day.

In the thirteenth century, the king of Naples issued an edict forbidding any one to practice medicine in his kingdom who was not a graduate of the school at Palermo. The requirements of the school were a study of three years in logic and five years in medicine. He must have attained the age of 25 years. He then received a diploma as now. The surgeon was required to devote his time when a student to anatomy, and to prepare himself especially in this department. A new era had now commenced to dawn upon Europe and the world. In the thirteenth century were established most of the universities of Europe. Soon after this the discovery of printing gave a renewed impetus to learning, and the buried treasures of the Greeks and Romans were brought to light. Knowledge was everywhere sought after, everywhere cultivated, and philosophers, statesmen, orators, and physicians, assumed the high rank to which their learning entitled them.

We have noticed the primitive period—that of Æsculapius, the priestly period, that of the Æsculapiades, the Hippocratic and Philosophic period, or the Greek period, the schools of Cos, of Pergamos and Alexandria, the Arabic period, the scattering

of civilization in the destruction of Greece and Rome, the dark ages, and that of light now dawning upon us—this the great era of the world, this the *magnus ab integro seeculorum nascetur ordo*. Great advancement had been made in the periods recited, both in surgery and in the practice of medicine. Trephining is described in all its minutia by Hippocrates, and for hundreds of years was practiced by the Æsculapiades. Even the superior anatomical school of Alexandria added nothing to this operation, and it was almost abandoned by the later Greek and Latin physicians, and ointments and pomades substituted. Nasal polypus was extracted and cauterised by Hippocrates, and the tongue, and the palate, and the tonsils were scarified and cauterized. One of the Æsculapiades even performed tracheotomy. Hippocrates performed the operation of empyema, and boldly punctured the chest for collections of pus or serum. The operation, however, fell into disuse afterwards, and was not practiced by the Greek, Latin, or Arabic physicians, and in fact was not revived until about the sixteenth century. He practiced paracentesis abdomino—*directs* that the puncture must be made near the navel. He did not cut for stone in the bladder, but says he abandoned that operation to the mercenaries who devoted themselves to it, which is significant that this capital operation was not only known, but practiced in the early age of medical science. This operation was also long abandoned, but was performed by the professors at Alexandria, and by Celsus at Rome, and by itinerants in the middle ages, until it came to be practiced again by the celebrated surgeon Guy de Chanlias Celsus. Galen and Leonidas, of Alexandria, treated hydrocele by excision, by the seton, cauterization, and puncture. All that our age has done is to add that of stimulating injections. The ancients were close observers of disease, and of all the causes inducing them, such as atmospheric changes, habits, manners, alimentation, and all other causes relating to health and disease, and we are astonished that prior to the study of anatomy, they practiced surgery as boldly and successfully as they did. Scarcely a disease now known but that was accurately described by Hippocrates,

Celsus, or Galen, and the zeal with which medicine was taught and practiced in the schools of Cos, of Pergamos, and Alexandria, may justly excite the wonder, and command the admiration of all ages and all men. But, upon the revival of letters, and the discovery of printing, and the establishment of medical schools throughout Europe, all that had been taught and known before was taught again, and although the improvement was slow, it was upon a sure and more substantial basis. Although they adhered to the doctrines of Hippocrates, Plato, Aristotle, Galen, Rhazes, and Avicenna, in all the schools until about the sixteenth century, still the amphitheatres for dissection and the laboratories of chemistry opened up new avenues of knowledge, which gave increased intelligence and knowledge to the medical world. Necropsy came into practice, and pathology made a beginning to give assurance to observation. Chemistry was rudely known as early as the third century as alchemy, the only object of which seemed to be change, or attempt the change of the baser metals into gold and silver, but really did not become a science until the last century, since which it has advanced more rapidly, perhaps, than any other branch of our science.

It was reserved for the sixteenth century to throw off adherence to ancient doctrines and dogmas, and to take a rapid and long step in the march of improvement. It was an age of regeneration in science, and while the torch of physical science was making the world brilliant by the discoveries of Gallileo, by his first calculated laws of gravity, by his discovery of the weight of the atmosphere, and his discovery of the movement of the earth on its own axis, and around the sun; William Harvey discovered the circulation of the blood, and Malpighi, a few years later, in 1661, demonstrated for the first time, by the aid of the microscope, the progression of blood globules in the small vessels; and Hallar and Helvetius instituted experiments to calculate and determine the forces and the manner by which the movements of the chest are affected. About the middle of the same century, lymphatic vessels and their functions were discovered by Picquet, which confirmed the doctrine

of Harvey and overthrew that of the ancients, which attributed to the liver the functions of hæmotosis. Comparative anatomy was carefully studied, and the structure of the nervous system better known. About the beginning of the seventeenth century, the celebrated mathematician, Kepler, announced that the chrystalline lense was not, as had been supposed until that time, the seat of vision, but that its function is to refract the rays of light. The researches of Sir Isaac Newton on light and color contributed also to perfect the theory of the visual functions. The organ of hearing and its internal muscles and minute bones were carefully studied, and Duverney and Vicussins, by comparative anatomy, corrected former errors, and established the true seat of audition in the membrane which lines the drum and labarynth. Thomas Willis regarded the brain as an assemblage of various apparatuses, and assigned special functions to some of its divisions, and Camper, by the comparison of heads of men and animals, established the facial angle as the criterion of intellect. Showing that as we descend from the higher to the lower animals, the forehead recedes and the jaws become more elongated. The vital forces attracted attention in this age, and while the mathematicians assumed to explain the functions of the animal economy by the laws of mechanics—that the secretions, the circulation and nutrition, were the result of the elasticity of the tissues and of the friction of liquids; the chemical physician explained it upon the principle of mixture of chemical elements, of alkalies, acids, gases, salts, and fermentations. But Francis Glisson, an Oxford professor, overthrew these fallacies by the recognition of irritability as a principle or part of the living solid tissues. In 1757, Haller published his great work on Physiology, and henceforth this branch of our science has held a separate existence from physics or chemistry, and it was demonstrated that life has its laws and its special forces, which require a particular method of study. In the seventeenth century, Cheselden, the Monroes, and Boerhave, made wonderful advances in surgery, anatomy, and physiology, and in our own time their works are standard authority. The next century, the

eighteenth, presents us with the most brilliant array of names that have ever shone upon the world of medical science. Brown, Cullen, Hunters, the Gregorys, Bichat, Lind, Pringle, and Jenner. Jenner, who has made himself immortal by the introduction of the cow-pox to protect the human family from the dreadful scourge which prior to that annually swept to the grave nearly half a million of the European population, and mutilated and disfigured as many more; Howard, the prison reformer, and Count Rumford, William Thompson, of New Hampshire, the Bavarian Lieutenant-General and philosopher, who gave bread and labor to the poor by his improvements, were of this age, and co-workers in medical reform. A long list of other names might be added, which would form a galaxy more brilliant than any the world has ever seen.

A division in the various branches of medicine now came into more general use, and men devoted themselves to special departments, and consequently a higher degree of perfection obtained than had hitherto. Abercrombie, upon the Brain; Lænnec, upon Diseases of the Chest; Hunter, upon Anatomy, Surgery, and (Syphilis;) Good, on Practice; Bird, on the Urinary Organs; Lawrence, Scarpa, Travers, and Richter, on Operative Surgery, and Diseases of the Eye; Cooper on Surgery; Desault and Bichat, the former on Surgery, and the latter upon the Membranes, Life and Death, and upon Anatomy and Physiology. A mere recital of these great names, familiar to us all as household words, sufficiently indicate the progress of medical science in their age. It was the era of intellectual growth and progression. It was the Augustan age of medical science; the crowning glory of all preceding epochs, and the volcanic upheaval of slumbering minds from the womb of time, as the precious metals are thrown up from the deep caverns of earth. *Salve magna parens virum.* In our own country, we have had Physick, and Rush, and Warren, to represent this age. The present century has not lost the impetus given by the last, and improvements have been made in the pathology and treatment of diseases that now impress us as perfect, but which, no doubt, in the future, and in a more advanced stage of medicine,

will be found as imperfect as many of the adopted theories and practice of former times, which have yielded to advancement. Since most of those before us have entered the profession, especial improvement has been made in the treatment of diseases peculiar to women; and for this we are indebted to no one so much as to Bennett, whose researches (in uterine pathology) have excelled those of Montgomery and Kennedy, and, in fact, all others. The pathology of inflammation and congestion has induced a most wonderful change in the treatment of diseases within the last few years, and the physician can now prescribe with more assurance to himself and satisfaction to his patient. He knows what he does; he travels a plain and well-known road in the bright light of a noonday sun. He discriminates and comprehends the pathological conditions before him, and treats inflammation as such, and congestion as such. When the Humoralists and the Solidists contended for supremacy in their respective doctrines, each one attributed all morbid phenomena to his own theory. Now, full credit is yielded to the influence of each and all the parts and elements of the human body—all necessary to life; all suffering, directly or indirectly, in disease.

Our researches are conducted with more philosophy. We study by analysis and synthesis. We separate to ultimate and known parts, and again combine in order; study and view all separately, and then combine and study the whole—their action, relation, and dependence one upon the other.

Men of sense no longer attribute to a single cause all disease, and to a single medicine a cure for all. The blood has been studied to its ultimate elements. The solids have been studied in like manner; and the action of remedies upon each have been thoroughly tested. But from these various *isms* light has been shed upon the science. From Homœopathy the profession has learned to give less medicine, and with greater exactness. From Hydropathy we have learned the value of water, externally and internally. But a few years since, the fevered patient thirsted, but was excluded from drink. In fact, in all ages, God's freest and best gifts, air and water, have been excluded from use to an extent unwarranted by science or common sense. From the

Thompsonian doctrine we have learned something of the value of the application of heat and moisture and stimulating applications. Hence, theories and doctrines which seem foolish and and unwise have their agencies to perform in working out good. Even to combat them requires thought and investigation. We have ourselves seen a change in pathology and therapeutical applications in almost every disease. We have witnessed the struggle and supremacy of science over ignorance; all of which has given a large per cent. of the saving of life over former years. The pathology and treatment of every variety of fever, of pneumonia, of dysentery, and, in fact, of nearly every disease, has changed, or undergone great improvement. WATSON, and TODD, and GRAVES, and BENNETT, and PARKER, RICORD, STANLEY, and WILLIAMS, and a thousand other glorious names, have given a new era in their respective fields of study and investigation.

Genius and learning is concentrated to special departments of our science; that has given a perfection that could not have been expected from universal devotion to the expanded fields, too large for the comprehension of any one mind; too extended for the brief span of life allotted to man.

And now, gentlemen, what is the duty devolving upon us? Clearly, it is to commence the great unfinished work of those who have preceded us, and to carry it on to the glory and honor of our profession, and to the welfare and happiness of mankind. Each one should be *vir probus medendi peritus*—an honest man instructed in the art of healing. He should be an earnest man with enlarged and catholic views in all that pertains to learning; in all that pertains to human life, and human disease. He should remember that his own sphere, whether in the country, the hamlet, or village, requires the same knowledge, the same thought, as that of those in the great cities of the earth: for the same complex diseases and accidents are presented for his treatment, his investigation, his decision and management, to those. Locality does not change the size of the brain, does not affect thought, but may stimulate it to action, and excite it to labor. All may enjoy alike the experience

and the ideas of all preceding ages, and by reflection and the cultivation of the judgement, may analyze, arrange, and use them to advantage.

Practical medicine involves the knowledge of all that is known of the science of medicine, and whether good or bad, depends upon the proper use of that knowledge.

We have yet much to learn, and we should, and may, all become investigators, improvers, and teachers. Specific inflammation will in all probability be extended beyond its present sphere. That of rheumatism, of syphilis, and variola, may be made applicable to other forms now regarded simple, but differing from them. Hygiene will be improved, an increased knowledge of atmospheric influences will aid us in bringing to light causes of disease now unknown. The now hidden mysteries of epidemics will yet be made plain, simple, and appreciable.

The bloody war from which we have just emerged has given no less luster to hygiene, alimentation, and the treatment of wounds induced by projectiles of improved character, than it has to the settlement of constitutional liberty. This age is one of progression; the fire of knowledge is consuming the accumulated rubbish of ages, and while the heavens and the earth are lit up by it, let us individually, and as a society, seize upon it, and make it brighter and brighter, until disease shall acknowledge our strength and power, and man shall go to the end of his three-score years and ten without its impairment, and shall die alone from expended vital force, and the fiat of the God who made and controls and governs all things.

HAVARD MEDICAL COLLEGE.—Dr. James C. White, the talented junior editor of the *Boston Medical & Surgical Journal*, has retired, in order to accept an adjunct professorship of Medical Chemistry, in the Harvard Medical School.

MILK CONSUMED IN NEW YORK AND VICINITY.—The milk consumed in the city of New York and its immediate vicinity, is estimated at an average of three thousands quarts a day.

DEATH OF DR. W. BRINTON.—Dr. William Brinton, F.R.S., the distinguished London physician, died of uræmia, on the 18th of January, aged 43 years.

ARTICLE XVIII.

SUSPENDED DEVELOPMENT IN TWIN PREGNANCIES.

BY M. M. EATON, M.D., Peoria, Ill.

In the *May No.* of the *Chicago Medical Journal* for 1864, Vol. 21, No. 5, page 206, I reported a case that I attended, where a lady was delivered of a fœtus of about two months development, about two hours previous to her being delivered of a still-born fully developed child, at full term.

The past summer, having had another case of a similar nature, I thought I would report this also, simply to add an item to accumulating experience on the physiology and pathology of gestation; such cases being of special interest to the pathologist, and not entirely void of interest to the general practitioner.

CASE II. Was called, August 14, 1866, to attend Mrs. H., living on North A—— St. Found her to be about 21 years of age, native of Illinois, in labor with her first child. She stated that she had always enjoyed good health, and she had the appearance of being in perfect health. On making an examination, I discovered the head of the child presenting to the os uteri, which was dilated about $2\frac{1}{2}$ inches, with a gristly substance hanging from the os, an inch or more in length. This, by more careful manipulation, I discovered to be the hand and arm of a small fœtus. I then made slight traction in the absence of the pain, and the fœtus was delivered. It was of the size of a three months fœtus, was not decomposed. The funis consisted simply of a slender membrane, without any appearance of bloodvessels. I should state that the amniotic fluid had been previously discharged. The labor now progressed naturally, and a fully developed living girl was delivered within an hour. The mother recovered without any trouble; the child still lives, a stout and hearty child.

Upon delivering the placenta, I could discover no indication

of the attachment of the funis of the fœtus to the placental surface. I have these two specimens of arrested development carefully preserved in alcohol. Now, the question arises, what caused the suspension of development in one and not in the other of these twins?

ARTICLE XIX.

THE INTERIOR OF THE URETHRA VIEWED BY A
MAGNESIUM LIGHT.

By E. ANDREWS, A.M., M.D., Prof. of Surgery in Chicago Med. College.

The invention of the endoscope, simultaneously by a French and by a Dublin surgeon, has opened a new field, both in the pathology and treatment of the urethra. The endoscope consists of a lamp, a perforated mirror, and an urethral tube. These, when combined, throw a condensed light into the urethra, and enable the surgeon to inspect every part of it. One of the important fruits of this instrument is, the discovery that the chronic inflammation remaining after certain cases of gonorrhœa is granular in its character, and is, in fact, the same disease as granular conjunctivitis, granular laryngitis, and granular inflammation of the cervix uteri.

Some months ago, I had an endoscope constructed after the Parisian plan, and used it with some degree of satisfaction; but there is often a deficiency of light in these instruments, rendering the view unsatisfactory, unless all parts are in perfect order. Seeking to overcome this evil, I one day procured some small magnesium wire, which, when held in the flame of a lamp, burns with a white light, whose brilliancy dazzles like the glare of the sun at noonday. Introducing the endoscope into the urethra of a patient, I caused a friend to insert the wire into the flame of the lamp. The result was to illuminate the urethra magnificently. The mucous membrane, with every little fold or patch of varied color, was as plainly in view as could possibly be desired. It could not have been seen any better, had it

been dissected and laid in the sunlight. By gradually withdrawing the tube, the whole of the canal may successively be seen as it collapses across the end of the tube. Seeing the perfection of this illumination, I have ordered a spring and some small wheel-work attached to the lamp, so that the wire may be made to advance into the flame without the help of an assistant. In this way, no doubt, the difficulty of the illumination will be fully overcome, and the urethra can be inspected almost as easily, and quite as perfectly, as the tongue.

Selections.

A HISTORY OF THE BREAK-BONE FEVER AS IT PREVAILED IN THE CITY OF MONTGOMERY, ALABAMA, DURING THE SUMMER OF 1866.

By R. FRASER MICHEL, M.D.

Read before the Medical and Surgical Society of Montgomery, January 7th, 1867.

The city of Montgomery was visited during the past summer by an epidemic of break-bone fever, which taxed the energies of the profession to their utmost extent.

The reader will see, as we progress in the narrative, that we have correctly named the disease. Many of the most prominent symptoms characterizing the summer and autumnal fever of the West India Islands, in 1827, were absent, as well as those marking the epidemic which prevailed in the southern sections of the United States in 1828.

Prof. Dickson, from whose able pen we derive much that we know of dengue, is so clear in his symptomatology of this disease, that we incline to the opinion that the epidemic we have just passed through was not one of dengue, but rather resembled what Dr. Rush has described as having occurred in Philadelphia in 1780, and Drs. Dickson, Wragg, Happoldt, and Arnold, as prevailing in Charleston and Savannah, in 1850.

We concur fully in the opinion expressed by Dr. C. Happoldt in his inaugural dissertation, published in the *Charleston Medical Journal*, for 1851, when he says:—"If the essential and characteristic symptoms of dengue be, a fever of nearly uni-

form duration, preceded by arthritic inflammation, and succeeded, after an interval, generally regular, by a secondary fever, which is almost invariably attended by a uniform eruption, and followed by violent pains of a rheumatic character, must it not be entirely distinct from a form of disease in which these symptoms are either *absent*, or their order of succession entirely different."

The first case of break-bone fever in Montgomery, occurred on the 7th of September, 1866, in the practice of Dr. J., in the person of Mr. M. G., who had not left the city for some months prior to his attack. I was called on the morning of the 8th to see two cases; one, a captain of a steamboat, running between Mobile and Montgomery; the other, a lady, just returned from the Springs, near Macon, Georgia, where she had been spending the summer. Here we see, that, at the outset, three persons were attacked, almost simultaneously, in the eastern, northern, and middle part of our city; and in ten days one hundred or more cases were under treatment. A sudden invasion followed by such rapid development, that any attempt to trace the disease from patient to patient must necessarily end in failure.

The last case we know of, terminated about the middle of November. The epidemic lasted seventy days, being at its height about the middle of October. There was hardly a family exempt; many in which not a member, white or black, escaped;—not a house, from those crowning the beautiful hills which encircle our city, to the banks of the Alabama, but was visited by this searching malady.

I may mention here, that prior to the occurrence of the epidemic, some of the physicians observed a few cases of scarlatina simplex; these cases were easily managed, and occurred during the months of May and June. In July and August, we had intermittent and bilious remittent fever, the type of the latter unusually severe. It is a noteworthy coincidence that in 1850, the same thing was observed to have occurred in Charleston and Savannah; and, as in 1850, Asiatic cholera again visited the North and West, as the cities of New York, Cincinnati, and St. Louis can testify.

Most of the cases began with fever, without previous *malaise* or chill, accompanied by severe pain in the forehead and small of the back, hot dry skin, smoky eye, full but not very frequent pulse; tongue often clean, occasionally red, in most of the cases covered with a yellowish-brown fur, without thirst. This condition usually lasted about eight hours, when the pa-

tient would complain of violent muscular pains, more frequent in the lower than upper extremities, followed by intense nausea and vomiting, lasting about 12 hours; the pulse falling gradually to 50 or 60 beats in a minute. Profuse perspiration would then break out over the entire surface, a slight eruption make its appearance, the gastric disturbance disappear, the pains gradually subside, and the patient, though weak, be able to resume his usual avocations; frequently returning to his accustomed place at the desk or behind the counter, forty-eight hours after the invasion of the disease; many, indeed, recovering before a physician could be obtained.

But while this description is a true history of most of the cases (in the proportion, at least, of six out of ten), we observed others of a severer character.

These graver cases of break-bone were preceded by *malaise* for two or three days, followed by chill more or less marked. And here we would call attention to the fact, that where the patient had passed through one or more attacks of malarial fever during the summer, he would not have simple rigor, but a severe chill, lasting in some instances at least an hour; then fever would supervene with its usual symptoms—pulse full, abrupt, rarely over one hundred to the minute; skin hot, dry, with a reddish hue, indicating tendency to capillary congestion; the heat so pungent, indeed, as to burn the hand when laid upon it. Eyes suffused and watery, pain upon moving these organs, especially when rolling them upwards, or when pressure was made upon them; sometimes intolerance of light was a prominent symptom.

Pain in the head, frequently supra-orbital, though in some of the cases pain of a darting kind was experienced; and as Dr. Wragg has described as existing in some of his cases in 1850, "so severe and darting that the patients said they felt as if a sharp instrument was thrust through the brain," and terminating in many cases in delirium. Pains in the limbs, particularly in the lower extremities; not confined, however, to the joints, but rather extending to the muscles. These pains were so severe as to prevent sleep, and several of our patients enjoyed no rest the first two nights of their attack.

The pain in the head produced great uneasiness in the region of the ear; and in certain cases a neuralgic affection of the fifth pair of nerves, was a characteristic symptom, giving rise to severe *tic douloureux*, as well as earache, which was attended in some cases by slight deafness.

The abdominal pains which we witnessed as occurring in the

Charleston epidemic in 1850, and which very frequently induced us to believe that we had a case of gastritis or enteritis to deal with, were entirely absent in this epidemic, so far as we are able to discover; and the dyspnoea produced by intercostal pain, which was observed as an almost constant attendant of break-bone, in Charleston, in 1850, was never seen during the past summer. The tongue, which at first, was natural, soon became covered with a greyish-brown coating; and the foul, disgusting taste in the mouth, lasting, in many cases, a week after convalescence was established, beggars description—"Oh! what a taste I have in my mouth!" was a constant exclamation. This symptom was, in some cases, attended by profuse salivation to such an extent as to cause some of our patients obstinately to insist that we had given mercurial preparations in the course of our treatment. The continual spitting reminded us very much of the Minorca fever of 1733 and 1748, as described by Cleghorn; which, by the way, Dr. Rush regarded as similar to his epidemic fever of 1780 (break-bone). In one instance (Dr. O.) we are convinced at least a gallon of saliva was secreted in twenty-four hours. Much nausea and gagging occurring in all of these cases, and violent stomatitis sometimes supervening; the abrasion of the buccal mucous membrane in some instances being very extensive, requiring prompt local treatment. We are particular in calling attention to this symptom (sore mouth), as in the epidemic in Charleston, in 1850, it was almost entirely absent.

The sense of taste being so much deranged, we are not surprised to learn from some of our patients that odors were not recognizable, and in others that certain odors predominated; for instance, one of our female patients told us that everything smelt like the muskmelon or cantelope. Her idiosyncrasy with regard to that delicious fruit was peculiar; she detested it extremely, and could detect one if concealed in any part of the house. The nausea, in almost every instance, was attended by profuse bilious vomiting, in many cases, very persistent, lasting from the chill until convalescence.

What we have so far described may be regarded as the first *stadium* of the disease; in some cases this embraced a period of from six to twelve hours, in others from one to three days. We saw no case during the epidemic in which this stage lasted more than three days; while we know that in 1850, we would frequently see it cover a space of five. The fever now subsiding, a perspiration would be observed covering the entire surface; sleep soon supervened of a refreshing character, but

attended or followed by an eruption which would usually cover the face and forehead, extending, in some instances, over the entire surface, and with it a feeling of formication, burning in the palms of the hands and soles of the feet. The perspiration, just alluded to, emitted a very disagreeable odor in some few cases. A professional friend informs us that one of his patients insisted upon continual change of bed-linen, the odor, which he pronounced "intolerable," he described as of a strongly urinous character.

The eruption varied in almost every case, resembling, in many instances, that of scarlet fever, and accompanied with a slight anginose embarrassment. Then again an erysipelatous blush would suffuse the face and hands; so persistent in some cases as to excite the belief that desquamation must result; but passing off slowly during convalescence, leaving the cuticle uninjured. In other cases, a lichenoid or miliary eruption, resembling prickly-heat or nettle-rash, with intense itching, would come out; and when this condition obtained in the young subject, desquamation was sometimes extensive, affecting the tissues beneath the cuticle. A professional friend informs us that in one of his cases, his little patient lost the nails of the toes and fingers. We saw no cases resembling rubeola, or impetigo, no petechial, variolous, phlegmonoid, purpurous, or papular eruption. And while referring to petechiæ, let us say we did not witness a case of hæmorrhage (as we did in 1850), from the gums, fauces, stomach, or bowels; nor did I hear of any during the epidemic, except a few cases of epistaxis.

These eruptions occurred during the second stage in most of the cases; but they would occasionally make their appearance during the febrile paroxysm, and extend even into convalescence. They had no special predilection for any particular part of the body, sometimes appearing on the forehead, face, and upper part of the chest, but just as often on the extremities or abdomen. In some instances there was no eruption to be observed, but towards the latter part of the epidemic there was hardly a case that did not present it in a well marked degree.

Our attention was particularly directed to the eruption in the negro cases, from what Dr. Dickson observed with reference to this class; and we endorse the fact, that very few negroes suffered in this way. We attended twenty-three cases among the blacks, and only two presented an eruption. The erysipelatous blush alluded to above, in some instances covered the hands entirely, causing them to become extremely sensitive, so much so as to entirely prevent their use as prehensile

organs. When there was any desquamation, of course the itching of the skin was present; in some cases severe and intolerable, and attended with swelling of the face.

The convalescence was slow, lasting a week or ten days, with anorexia. We saw no case during this epidemic which reminded us of the extremely slow convalescence of some of our cases of break-bone fever in Charleston, in 1850. It was not unusual then for a patient to take three weeks or a month to convalesce. Nor did any case under our care end in typhoid disease. There was no tottering or irregular locomotion; no staggering, uncertain walk, requiring the use of a crutch or stick, as we often see in dengue; no stiff affected gait, nothing peculiar. When you met a friend whose absence from his accustomed occupation had been observed, you could not tell by any external sign that he had had break-bone fever; you would only ascertain the fact by making inquiry to that effect.

And, now, the question naturally suggests itself, were there any cases of relapse? Very few, we answer, if any. We heard of none, at least, and would invite attention in passing, to the fact, that this was a common occurrence in the epidemic of break-bone fever in 1850. Dr. Wragg, in his able essay on this subject, says: "Another remarkable feature of this fever was the tendency to relapse, or the ease with which it was brought back by premature exercise, fatigue, or any kind of exposure. We have seen it recur under these circumstances, as often as three times, and on each return, with marked aggravation of all the symptoms. Often, when the first attack had been exceedingly mild, the subsequent ones would be excessively severe, and always of longer duration than the first." Here there is a marked difference between the two epidemics of 1850 and 1866; we, however, believe the diseases were the same, though in some features they may have differed.

As during epidemics of Asiatic cholera, there are cases (if they can be called such) in which slight pain is felt in the abdomen, and even considerable *borborigmus* is apparent without any other symptoms characterizing this disease; we saw many patients, who, with no fever, had some one or more of the signs of the epidemic disease, as vertigo, nausea, syncope, deafness, pain in the head, back, and limbs, followed by lassitude, *the eruption not appearing*. We must call these cases *break-bone fever without the fever*, and we incline to the opinion that these symptoms were sufficient to give those who so suffered, immunity from the severer form of the disease during the epidemic. Persons of all ages were subject to the disease—the

child at the breast, and the venerable elder of four score years, both male and female, white and black; and it created a surprise to see the aged recover so promptly from the effects of the malady; indeed, an old professional friend remarked, "that he was going down the hill very fast before he was attacked, but since he had recovered he felt better than he had been for years, and he believed he was a stronger man."

Some of the sequelæ in the Charleston epidemic of 1850 were absent in this—for instance—the boils, carabuncles, and abscesses were not found. The enlarged and deformed joints with extensive effusion were rarely seen. The remarkable loss of hair was not present in this epidemic, and even during the attack some of the symptoms of the Charleston break-bone were slight or totally wanting—for instance—the intense nervous trembling, which marked the onset of the disease, the jerking and twitching during the attack were not witnessed; and, though *one* case of the disease was ushered in with convulsions, no death from this complication was recorded. We heard of no pregnant women aborting, as in dengue, from the suffering and pain induced by the fever, and though, as we have already noticed, audition was much impaired, no case of permanent deafness was observed. During the progress of this disease, we saw no case developing those hallucinations, resembling the demons of *mania-a-potu*, so painfully common in 1850. On the other hand, we would invite attention to the extreme debility and exhaustion in which our patients were left, resembling the epidemic just alluded to, and in some cases, when contrasted with the duration and want of intensity of the malady, truly surprising. In many cases the patient was even threatened with syncope, upon suddenly changing from the horizontal to the erect position, showing the enfeebled condition of the heart.

Pavi passu with the epidemic, we observed many cases of ophthalmia, some occurring among our break-bone patients, and appearing as a prominent symptom. Most of the cases engrafted upon the epidemic disease were quite severe and stubborn in character—the lids extremely granulated, and in some of the severer cases, corneitis, sclerotitis, and even iritis, with great photophobia, were observed.

Upon the causes of the epidemic we will have little to say. The atmospheric changes, prior to, and during the epidemic, may lead those more conversant with meteorology to form some opinion, however, and we will, therefore, give as accurate an account of them as the limit of this paper will permit.

The spring was peculiarly cold, much more so than is usually observed in this latitude, and the cool weather continued into June. We had, during this season, more rain than usual, and the winds were from the south-west almost exclusively. After the middle of July, the weather became hot, and continued *very hot* until the middle of September. An old and observant citizen tells us that it was hotter in Montgomery during that period than he had ever felt it before, and he resided in the place forty-seven years. The thermometer ranged in mid-day between 90° and 95°. He called our attention to another fact in connection with this heat, worthy of notice. "That during that time we had less thunder and lightning than he had ever known before;" an indication of the peculiar electrical condition of the atmosphere. The nights were oppressively hot, the thermometer, in the early part of the night, registering usually from 85° to 87° F. During this time, that is from the middle of July to the middle of September, the winds were westerly and easterly alternately. At this time the drought was excessive and destructive to vegetation, as the scanty crops demonstrate; and, singular to relate, from the latter part of August to the middle of October, during certain spells, that is, when the wind would suddenly shift from west to east, heavy falls of rain ensued, deluging the country. Slight frost was observed in and around the city on the 5th of November, but not severe enough to destroy vegetation, and it was not until the night of the 21st of November, that the cold was intense enough to kill garden plants. Here our epidemic differed from dengue. It did not occur in a pleasant, cool, and temperate season, nor did it select the winter or early spring, as is its wont, nor were any foggy mornings to be observed.

Whilst treating of the causes of this disease, it is, perhaps, proper to add that we had an epidemic of small pox, beginning in the spring of 1865, and ending in the spring of 1866. This, associated with what we have already mentioned, "that several cases of scarlatina simplex occurred during May and June." would lead us to ask, what impression this condition of things could make upon the atmosphere of Montgomery? It appears to us that it would be very rational to believe, that if we had a *fever*, the skin would play a very prominent and important part in its history.

At this point, we would request the reader to examine the character of the summer and fall seasons in Charleston, in 1850, so clearly and accurately recorded by Dr. W. T. Wragg, in his paper on Break-bone Fever, as well as the same seasons

in Philadelphia, in 1780, described by Dr. Rush, and in Montgomery, in 1866, as now furnished by us; and I think a striking parallel will be observed, or, to say the least, a very singular coincidence.

During the epidemic, the usual intermittent and remittent fevers continued; they were more extensive in their range, however, covering a much larger surface than ever before. Certain localities, which hitherto had been regarded as healthy, and which were used as summer resorts by the citizens of Montgomery, were quite sickly this summer, and persons did not know where to take refuge to insure health. This condition of things (an epidemic of break-bone fever, accompanied by intermittent and remittent fever) was very embarrassing, and the physician could not be too cautious in pronouncing dogmatically upon the various cases which marshalled themselves before him for treatment. We saw many cases of the epidemic fever remitting and even intermitting.

We now come to the most important part of our discussion—the pathology of the disease. This is always a difficult question to determine with regard to break-bone fever; the fact, that no deaths occurred, and that consequently no *post mortem* examinations were made, is one reason of its obscurity. *No death occurred from this disease during the epidemic*, and nearly half the population were afflicted with it.

We incline to the opinion already expressed by others, that the disease is located in the nervous system, and that, secondarily, the cutaneous surface becomes affected—a *nervo-cutaneous* affection. That the nervous system is first affected I have no doubt: observe the pain, tremor, rigor, delirium, and other phenomena already described; then the cutaneous system, as is demonstrated, first, by the feeble capillary circulation, the reddened surface, the eruptions, the desquamation, and the intolerable itching, almost always observed during convalescence.

How any one can confound such a disease with yellow fever, when we consider the uræmic poisoning, the terrific hemorrhages from eyes, gums, stomach, and intestines and ovaries, which occur in the latter; or, on the other hand, with bilious remittent, so well characterized by its *post mortem* appearances, the inflamed gastro-intestinal mucous membrane, the enlarged liver and engorged spleen, seems to us matter of surprise. No! Break-bone fever is a peculiar affection, and one which deserves more notice than it has hitherto attracted.

The epidemic may have been taken for dengue, and to this point we would invite special attention. Prof. Samuel Henry

Dickson, thus describes dengue, page 606, vol. II: "Dengue usually made its invasion with pain, stiffness, and swelling of some of the smaller joints, often of the muscles of a limb, rigidity of the neck, aching of the back and loins. These pains were followed, after an uncertain, though generally brief period, by headache, suffusion of the eyes; abrupt, full, frequent, pulse; hot, pungent, dry skin, restlessness, thirst, and other tokens of febrile excitement. The fever did not remit, but declined and disappeared in a great majority of cases on the second or third day. In this early stage the tongue was generally clean, and the stomach quiet; but sometimes there was nausea or even vomiting, the determination to the head was occasionally violent. Instances occurred in which delirium was among the first symptoms, coming on at the commencement and enduring until the subsidence of the febrile paroxysm. At this time the skin lost its heat and dryness, becoming relaxed, with abundant perspiration, and the local pains were all lessened in degree. A sort of miliary eruption, or rash in some persons, attended this sweating stage, and in a few others preceded both the local pains and the fever. It was, however, as connected with this first stage of dengue, a very inconstant symptom, seeming rather a coincidence than a symptom. The pains of the joints and muscles which, as has been said, were diminished in severity at the subsidence of the febrile exacerbation, did not go off entirely; a degree of swelling, stiffness, and tenderness of the affected parts remaining permanently, though varying much in intensity in different individuals. This condition of things constituted a sort of deceptive interval between what may be described as the first and second stages of this strange disease. Many now believed themselves to have passed through the attack, and attempted to resume their ordinary occupations; but soon had occasion to discover that their sufferings were by no means at an end. On the third or fourth day, there being no fever present, or a very obscure degree of it, the tongue would begin to be coated with a yellowish fur, and the stomach would become distressed, uneasy, and irritable. The patient was now low-spirited, fretful, and anxious. Vomiting came on in some, with great languor, lassitude, debility, and restlessness at night. This was regarded as the most oppressive and insufferable of the stages of the malady. On the fifth or sixth day from the invasion, the period varying somewhat in different individuals, the annoying symptoms just described were relieved by the coming out of an abundant eruption, met with so constantly and in so very great proportion of

the cases, that it clearly demands to be considered a characteristic and essential circumstance in the history of the disease. It consisted of minute papulæ, somewhat elevated, of a florid red, and distributed in irregularly shaped patches; the feet and hands being somewhat swollen, with a sense of numbness and thickening. It appeared first on the face, then on the trunk and thighs, gradually spreading to the extremities. It resembled scarlatina more than measles, in the hue and aspect of the skin, but was less diffused or confluent than either. When fully developed, it was attended with some itching and burning of the surface, and at this time a second febrile paroxysm came on, with return or aggravation of the muscular and arthritic pains. Inflammation and enlargement of the lymphatic glands in the neck, axilla, and groin, attended in a good many cases; these parts being apt to continue swollen and painful for some time after convalescence was finally established. In a few instances suppuration of these tumors took place. The eruption disappeared after two or three days' duration, becoming gradually paler, with some desquamation of the cuticle. Of all the symptoms of dengue the affection of the joints was the most tenacious and troublesome, adhering for weeks to some patients, and constituting a sort of permanent lameness or loss of mobility. Nay, even so late as 1835, some of the population of cities visited by this plague, persisted in speaking of the rheumatic or quasi-rheumatic decrepitude and pain under which they labored, as the effects of dengue.

"Pregnant women, when attacked, were very liable to abortion, and a remarkable number of miscarriages and premature labors occurred. A sore mouth was among the frequent symptoms, ulcers formed in the mouth. Dengue is to be classed properly among the exanthemata. It is an eruptive fever of distinct and specific character. Its essential symptoms are, in the first stage, a painful affection of the joints and muscles; and, in the second, divided by an interval obvious and sufficiently regular, a cutaneous eruption. The arthritic inflammation of the first stages was attended by fever of the ordinary inflammatory type, of twenty-four to forty-eight hours' duration. The eruption was preceded, as is usual in the exanthemata, by considerable gastric oppression, with nausea, and sometimes vomiting."

We must regard the epidemic we have described as differing in many respects from the dengue, so beautifully portrayed by that accomplished scholar and physician, Prof. Dickson.

Look carefully at the premonitory symptoms, the kind and severity of the pains which marked the onset, continuance, and

termination of the two diseases. Observe the intermission, not accidental, not occurring by chance, but regular, never deviating, always coming to the relief of the sufferer, and to be counted with certainty by the hands of the clock. Then examine the secondary fever, accompanied always by an eruption "that clearly demands to be considered a characteristic and essential circumstance in the history of the disease." Look at the prompt convalescence of dengue, with the deformed and enlarged joints, the patient staggering about, bald-headed, with stick in one hand, or crutch in both—remark the common accident of abortions and premature labors, and then say if this condition of things resembles, however remotely, the epidemic we have just passed through.

We believe that the fever described by Dickson, Wragg, Hoppoldt, and Arnold, in 1850, is the disease we had to contend against this summer in Montgomery; beginning in the nervous and cutaneous system, and not in the ligamentous and fibrous.

It may not be irrelevant to present at this point the description of the epidemic fever which occurred in Philadelphia, in 1780, given by Dr. Rush: "It affected all ages and both sexes. Medical men would seem to have been specially liable to it. No other febrile disease was observed during its prevalence. It came on sometimes with rigor, seldom with a chill. Many instances occurred in which it was introduced by delirium. The pains which accompanied it were excessively severe in the head, back, and limbs; in some they affected the neck and arms, and in one case produced a difficulty of moving the fingers of the right hand. Hence the disease was sometimes believed to be a rheumatism, but its more general name among all classes of people was the break-bone fever. A nausea universally, and in certain instances vomiting attended. The pulse was full and quick, but never hard; there was little or no thirst. A rash often appeared on the third or fourth day, accompanied by a burning in the palms of the hands and soles of the feet. Convalescence was slow and tedious. The disease was seldom fatal. The treatment required was singularly mild." Now, we see in this description of Dr. Rush, an almost accurate account of the fever we witnessed in the city of Montgomery, in 1866, and in Charleston, in 1850.

Frost (as it always has done) terminated the epidemic. After the middle of November we heard of no new case. No stranger coming into the atmosphere after frost, contracted the disease, although those who had spent the summer here were

liable to an attack a few days after this truly welcome visitor.

We do think it contagious;—many cases found [their way to the different villages and towns in the neighborhood, by railroad and stage, or slowly along the beautiful waters of the Alabama; but we heard no voice echoing its painful though harmless presence as epidemic in any of the garden spots of the State.

The period of incubation varied from five days to a week; though we knew of one patient who was attacked forty-eight hours after his arrival in Montgomery.

The prognosis was, of course, favorable, for when a disease never destroys life, or leaves any organ of the body seriously damaged, we are compelled, no matter how painful or seemingly severe it may be, to pronounce it harmless.

We would remark, in this connection, that although cases of bilious remittent, some of them congestive, occurred during the summer, we heard of no case of break-bone assuming the congestive type; a fact worthy of special notice.

With regard to the treatment of this disease, there is of course little to be said; almost all the physicians here treated it according to the *medecine expectant*.

If we arrived in time to find our patient with chill, warm stimulating applications were made to the spine and extremities; we preferred the spirits of turpentine. A warm foot-bath was an excellent adjuvant, and with a few blankets thrown over the patient, we awaited the cessation of this symptom. During the fever which followed, we did no more than attempt to relieve the troublesome symptoms as they arose. If our patient was costive, the bowels were evacuated with an enema, sometimes by laxatives, a sedlitz powder, or a dose of castor oil. In this stage refrigerants were freely used; cool iced lemonade, and sponging the entire surface of the body with vinegar and water; cold applications to the head, as by shower-bath and ice in bladders to the frontal surface; frequently pepper plasters to the temples gave relief. The nausea and vomiting was quited by sinapisms over the epigastric region, and by the internal administration of magnesia or lime-water. When the fever was subsiding, a warm infusion of boneset was ordered; or, what our patients preferred, hot lemonade. In some of the cases where an intermission in the febrile paroxysm was observed, the administration of fifteen grains of the sulphate of quinine in divided doses seemed to control the disease, and to hasten convalescence.

In those cases in which the throat was affected, a gargle of

the chlorate of potash was advised, or our patient permitted to dissolve in the mouth every hour, until relieved, the chlorate of potash lozenger prepared by Hegeman & Co. The detestable taste in the mouth, which persisted even after convalescence, is difficult of relief. We found that claret wine, freely administered, gave more speedy relief than anything else. The administration of opium lessened the muscular pain, promoted the action of the skin, and induced sleep. To relieve the neuralgic pains, the sulphate of morphia injected hypodermically, proved eminently successful. The application of olive oil and lime water, as well as alkaline washes to the skin, were found the best agents to relieve the burning and itching of that sentient surface.

The epidemic was certainly a mild one, when compared to that we witnessed in Charleston, South Carolina, in 1850; but in all its essential features, it resembled the latter so closely, that we think we must, without hesitation, class it with that form of epidemic fevers which so far seem exclusively confined to this Continent. The English and French writers say nothing of it. As a disease generally recognized, or of wide-spread, or even occasional occurrence, it seems to be unknown in Europe. We have therefore thought it not unwise to put the account of this epidemic on record, if only for the sake of the future medical historian.—*Southern Journal of Medical Sciences.*

THE MEDICAL USE OF ELECTRICITY.

By G. M. BEARD, M.D., AND A. D. ROCKWELL, M.D., New York.

It was once remarked by a distinguished philosopher that we may be sure that a science is in its infancy when its advocates are particularly dogmatic in the expression of their beliefs.

Judged by this standard, the science of the medical use of electricity is just emerging from infancy into childhood, for its disciples are far less positive in the declaration of their views in regard to the unsettled points connected with it, than were the original investigators fifteen years ago. A brief survey of the history of recent explorations in this department will fully explain our meaning. In 1850, Duchenne, of Boulogne, published a work entitled, "*Exposition d'une Nouvelle Methode de Galvanization, dite Galvanization Localisee,*" in

which he announced the leading idea of his system, namely, that "one can localize the electric stream over a fixed point under the skin, if the end of a conductor be covered with a moist sponge, and strongly pressed upon the skin." In 1855, he published another work, an epitome of five years experience, entitled, "*De l'Electrization Localisee et de son Application à la Physiologie, à la Pathologie, et à la Therapeutique.*" This book excited not a little attention, and really created an era in medical science. It aroused the enthusiasm of the author's countrymen, who had the opportunity of witnessing his brilliant demonstrations, and was abridged for the German physicians, by Dr. Erdmann. But the number of those who were inspired to enter the list as investigators was comparatively small. Like all the original explorers in this department, Duchenne laid special stress on his physiological experiments. At no era of medical science had there been found any considerable number in any country who were willing and able to devote their lives to purely experimental researches that achieve no direct practical results. While Duchenne had astonished both himself and the scientific world by the novelty of his experience, neither he nor his admirers were fully alive to the immense therapeutical value of his discoveries. As a consequence, the cause of electro-therapeutics would not be espoused by those who felt compelled to turn all their endeavors to practical account, and but very few of those who warmed into enthusiasm over his demonstrations were willing to occupy themselves exclusively in the same field. But Meyer of Berlin, Baierlacher of Nürnberg, Althaus of London, made a specialty of this department, and have published works in which the method of Duchenne is adopted as the basis. Remak, of Berlin, was one of the few who were sufficiently alive to the value of Duchenne's experiments to pursue the subject still further, and in 1855, he embodied his experience in a work entitled, "*Ueber Methodische Electricisirung Gelahmter Muskeln*,"—"On the Methodical Electrization of Paralysed Muscles"—in which he announced a system entirely different from that of Duchenne, and became the leader of an opposite school. The leading idea of his work was this: "That in order to bring a muscle to complete contraction, it is far better to excite its motor nerves than to allow the stream to operate upon the muscular substance itself."

Moreover, he employed the galvanic stream almost entirely, while Duchenne had performed his experiments with the faradaic current. Remak reported astounding cures, but at first

failed in enlisting the sympathy of the profession. Subsequently, however, he learned wisdom by experience, and became more wary in his statements, and calmer in his manner of expression. Gradually the profession accorded to him their confidence, and some of the ablest minds of Germany—among whom we may name Benedict, Schulz, Meyer, Neumann, Rosenthal, Frommhold, and Eulenberg—are numbered among his disciples. For some time a fierce and unreasonable controversy was carried on between Remak and Duchenne, which, both in its character and in its results, singularly reminds one of the fabled story of the knights who quarrelled over the pictures on the opposite side of the public sign. Remak contended for the application of the galvanic stream on the motor nerves, while Duchenne persisted that the best results were obtained with the faradaic, or induced current, on the muscles themselves.

At a public trial in Paris (as we are informed by Garratt), Remak demonstrated on a living subject that so far as producing contraction of a muscle goes, the induced current applied to the motor nerves is far less painful than when applied to the muscular substance. But so far as the general remedial effects of electricity are concerned, both were right, as is now tolerably well established.

So far as is yet ascertained, the remedial effects of electricity, whether employed in the form of galvanization or faradization, are governed by no fixed laws. Experience is our only guide in their use. All the investigations of scientific men have thus far failed in reducing to any system the different therapeutical effects of the galvanic and the faradic or induced currents.

Although there has been not a little speculation on this very theme, and although numberless experiments have been instituted with a view to establishing the superiority of the one or the other, yet we believe that the most progressive and candid of the investigators of the present day are willing to admit that the whole subject is yet in chaos. It has been found that the brilliant results that Remak obtained by the galvanic stream can also be secured by the use of the secondary current, and it has also been found that they are, so far as we can judge, very capricious in their effects, setting at defiance all the attempts of inquiring minds to reduce their employment to a logical system.

Those who are accustomed to use the various kinds of electricity, namely, the galvanic or constant stream from a large number of elements, and the primary and secondary induced

current of the electro-magnetic machine, testify that while all are beneficial, *no one* has been found to be so superior to the others as to justify its exclusive use. It has been thought that the galvanic stream was more serviceable in rheumatic and neuralgic affections, and in paralysis dependent on central nerve derangements; but this is very far from being established.

There are cases where at first the induced current acts more speedily than the galvanic stream, which cases, later on, seem to be more amenable to the latter. One day a patient may present himself with a rheumatic disorder that is at once relieved by faradization, and the next day another patient with precisely the same disease, at precisely the same stage, is more speedily aided by galvanization.

More than that, there are cases which, at the beginning of the *seance*, are benefited by galvanization, and before its close yield to faradization. Nay, further, there are instances where one form of electricity seems to irritate for the time being, while the other at once calms and soothes. What, then, is the law of their operation? There is none, so far as can be determined in the present state of our pathological knowledge, and there is no guide to their use except experience. The German investigators have carefully studied the effects of the different forms of electricity in exciting muscular contractions, and they have refined this subject, as it appears to us, to an absurd and profitless excess. Ziemssen has experimented largely on the dead subject, and has ascertained the particular border points that are most susceptible to the electrical influence.

It has been very clearly established that muscular contraction is produced more completely and with less pain when the electrodes are placed on the "border points" where the motor nerve enters the muscle, than when applied to the bellies of the muscles themselves.

With these views of Remak and Ziemssen our experience fully accords. We have found that in certain cases of atrophy and loss of power, where we fail in producing contractions by application directly over the muscles, we do succeed very unaccountably by pressing the fingers along and underneath the borders of the same muscles.

We have found that some inveterate cases of rheumatism that evinced no signs of yielding when the hand was applied in the general way, at once took a favorable turn when the fingers were pressed along and underneath the borders of the muscles concerned.

But important as is this fact, it is hardly worthy of the at-

tention it has received at the hands of some of the German investigators.

Ziemssen and Rosenthal seem to act on the supposition that electricity is chiefly useful in cases of paralysis, whereas its proudest victories has been gained over long-standing dyspepsia, constipation, neuralgia, amenorrhœa, chorea, hysteria, and other disorders connected with enfeebled vital organs, and a deranged nervous system.

On the other hand, we have found that the different forms of paralysis that present themselves to us for treatment give far less speedy and satisfactory results to the electrical treatment than almost any other form of disease. And yet physicians and the laity are possessed with the idea that paralysis is, *par excellence*, the disease that justifies the use of the battery.—Our present knowledge of therapeutical value of the different forms of electricity may be thus summed up:

1st. Galvanization and faradaization are of so nearly equal value in paralytic, rheumatic, and neuralgic affections, that we are hardly justified in employing one to the exclusion of the other. It would seem that the best results are obtained when they are used with alternations and variations, according to the indication of their effects.

2d. Muscular contractions are excited with the least pain and most speedily when the electrode (either a sponge, a metal, or the hand) is applied along the edge of the muscle, and especially at the border point where the motor nerve enters the muscular substance.

3d. The ascending faradaic current has a great power of exciting muscular contractions, and stimulating the nerves, and is especially indicated in local paralysis, ankylosis, and plastic effusions. Applied through the body with the positive pole at the feet, its effects are not unfrequently very disagreeable.

4th. The *descending faradaic current, thoroughly applied, with the negative pole at the feet, is a tonic and corrective of far greater efficacy than any other remedy or combination of remedies now known to science.* Judiciously given, it can never work harm, save in cases of pulmonary tuberculosis, and in such cases we rarely employ it.

5th. The hand is by far the best electrode, and for the following reasons:

(a) It is more effective, from its wondrous power of adaptation. The fingers, better than sponge or metallic electrode, can feel their way along the border of the muscles and press towards the deeper tissues.

(b) By no other instrument can the patient receive the same quantity of electricity with so little irritation, particularly when applied on the head, or over any sensitive diseased organ.

6th. *Although paralysis in its different forms is usually more benefited by electricity than by any system of internal medication, it is yet among the least tractable of the various diseases that present themselves for this method of treatment.*

7th. *The diseases which are found to yield most readily and surely to the different forms of electricity in the various modes of application, are neuralgia, dyspepsia, rheumatism of the subacute and chronic varieties, chronic bronchitis, constipation, amenorrhœa, anæmia, hysteria, and general debility.*

8th. The electric streams are of great value as adjuvants in the diagnosis of disease, inasmuch as any deviation from its normal sensitiveness of any part of their influence is readily indicated. In this way we learn where the disease is located, although we may not be able to determine its precise nature.—In order to illustrate more clearly to the profession the method and result of our treatment by faradaization, we propose to give in detail some of the more interesting cases of the various forms of disease in which we have employed it. We can hardly expect that the bare statement of the curative powers of electricity will receive absolute credence without the presentation of some typical examples.

Even Remak himself (as stated above) at first experienced not a little difficulty in gaining the confidence of scientific men. So easy is it to represent on paper what is very difficult to practically achieve, and so ready are specialists to dignify their own peculiar method of treatment to the exclusion of all others, that we cannot hope for the full appreciation of the wondrous powers of electricity, except by those in the profession who may be led to employ the descending faradaic current as faithfully and persistently as we have ourselves.

Neuralgia.—This horrible affection, which so often disheartens both physician and patient, we have found to yield to the persistent application of electricity, as uniformly, perhaps, as any other disease, unless it may be nervous dyspepsia. Whether it exists either in the weekly or the strong it is always greatly alleviated and generally cured, sometimes by a few applications, in other cases by a protracted treatment.

Indeed, our unexpected success in certain cases did much to stimulate us to make special investigation on the whole subject of electricity.

Case First.—In the latter part of August of last year, Mr.

B——, a broker, down town, came to our office complaining of a severe neuralgia of the back of the head and neck, that had rendered his life miserable for one year and a-half. He had consulted many physicians and had taken much medicine, but had found little relief. He was a tall, well formed, muscular man, with a hard, full face, that suggested great native vigor of constitution.

With not very strong assurance of hope, either on our part or on his, the treatment by the descending faradaic current was recommended and commenced on the 5th of September. He was relieved on the first application, which was a very thorough one, and extended over all the vital organs. On the 8th of September he again came for treatment, and reported himself as much improved. On the 10th, he reported himself as being entirely free from pain. Another application was then made, and he bade us good-bye, preparatory to going into the country. We could hardly believe that the cure could be anything more than temporary, and were not surprised when he again presented himself on his return and informed us that his old enemy had made him another gentle visit.

We gave him another thorough application. A short time since he called at our office, and informed us that up to that time he had been perfectly well.

Case Second.—Miss H. The following case proves that that most distressing and persisting of all neuralgic troubles, *tic douloureux*, may be cured where medication had failed.

This patient presented herself for treatment in the early part of September, expressing herself, however, as having but little hope of experiencing more than a slight temporary relief.

Previously she had been treated by electricity with some short-lived benefit; sufficient, however, at that time to inspire her with hope. She was doomed to disappointment, for in a very few weeks the paroxysms of intense pain, which before had made her life miserable, returned with greater severity than ever. As she told her story, the sudden, sharp shooting pains in her face would, every few minutes, cause her in agony to hold her speech. To such an extent had this mysterious disease affected her that occasionally her tongue seemed almost paralyzed, and at times her utterance was thick and broken. These frequent and terrible paroxysms had left imprinted on her pale face an expression of constant care and suffering. Her own estimate of the value of life was that death was preferable to an existence of such constant agony. Her physician had tried almost everything in the *materia medica* supposed to

be beneficial in such cases; and so without delay, doubting yet hoping, we commenced treatment by faradaization. The patient came every other day, and for the first two or three times only a comparatively mild current was given.

The strength was gradually increased, but no improvement was manifest. After the seventh or eighth application, however, a current, as strong as the operator and patient could well bear, was given for fifteen or twenty minutes, at each sitting, and in addition to the external application, the tongue was thoroughly electrified by means of a metallic spatula. From this time a rapid improvement was noticed.

The paroxysms occurred less frequently and with less severity. She discontinued treatment on the 20th of October, having had no return of pain for three weeks. Up to this date, January 2, she has had, so far as we can learn, no return of her trouble. Whether in this particular case the cure is *absolutely* permanent it is of course impossible to say; but enough is known to convince the patient and those who knew her that the benefit derived was great and incalculable.

Tic Douloureux, as it is well known by any who may have had much experience in the application of electricity for the disease, is the most difficult to cure or benefit of all neuralgic affections.

Of the neuralgias, the cervico-occipital, intercostal, lumbodominial, and cephalalgia, are all in the vast majority of cases speedily cured; and although some cases of facial neuralgias, which have resisted all treatment by medication, still fail to be benefited by electricity, yet it is our experience that the great majority, even of such cases, are permanently cured by persistent treatment.

Case Third.—The power of electricity over neuralgia of a specific character, was very well illustrated in the case of a Mrs. B., sent to us by Dr. Cummings.

When she first consulted us she represented that for years she had been suffering from a terrible neuralgia in the head, and which at times attacked other parts of the body. For six weeks the pain had been so severe that she had been unable to pursue her usual avocation, which was that of an operator on a sewing machine. She was a plump, fleshy individual, with full round cheeks, indicative of anything but delicate health. Indeed, so vigorous did she seem, that we told her that only local applications would be necessary in her case, and accordingly directed her to place her hands on the sheet of copper to which the negative pole was attached, while a very gentle current was

passed over the front and back part of the head. The application had not been continued more than two or three minutes, when she exclaimed, "Doctor! my pain is all gone; this is the first quiet moment I have had for a long time."

The sitting lasted about ten minutes, and at its close she was directed to come again on the following day. The next morning she informed us that she had experienced no more pain in her head, but that "the disease had gone to her breast and shoulders." This fact, taken in connection with some other statements that she had incidently made the day before, led us to suspect that syphilis was the cause of her sufferings. In reply to questions she confessed to every symptom of secondary syphilis, and, in fact, had been aware all along that the disease was in her system. According to our habit in such cases, we made the applications down the spine and over the vital organs. The relief was complete, although not as instantaneous as the day previous. Several times the applications were renewed at intervals of two or three days, and each time she expressed herself as very enthusiastic over the improvement she was making. We examined her throat with the laryngoscope, and found a slight degree of inflammation, which readily yielded to the nitrate of silver. The fifth time she came she reported that she had returned to her work, and was able to labor nearly as hard as at any time in her life. The horrible nocturnal pains had entirely disappeared, and her sleep, which before had been so much interrupted, was quiet and refreshing. There remained, however, some neuralgic distresses in the eyes, which disappeared after a few more local applications.—*Medical Record, N. Y.*

Correspondence.

VAN BUREN, ARK., Feb. 12, 1867.

PROF. DAVIS—*My Dear Sir:*

After the reiteration of expressions of obligation to you personally, and my profound regard for your eminent services to the profession and to the public, permit me to relate to you my observations in the use of *chloride of sodium* in the ulcerative stages of typhoid fever.

During the summer and early autumn of 1861, this commu-

nity was visited with one of those epidemics of remittent and typhoid fevers, or rather with that pernicious form of bilious remittent fever, which speedily runs into a typhoid form, with extensive ulceration of the glands of the bowels. My first case was that of a young gentleman, a merchant of this city, Mr. M. Hinkle, aged 22, attacked Aug. 1st, with the ordinary chill, followed by continued fever and immense discharges per anum, a few days thereafter, of blood and pus. I tried the routine treatment all to no purpose, so far as controlling the latter symptom, when it occurred to me to try COMMON SALT. Taking a saturated solution of the article, I gave two teaspoonfuls every 20 minutes, and continued about 3 hours, with a most decided and remarkable result. At the time of commencing its use, which was on the ninth day after the attack, and the sixth day after the supervention of the ulceration, my patient was exceedingly low, and the ulceration, judging from the quantity of blood and pus, was extensive. I continued the use of the remedy for fifteen days before I could finally dispense with it, and, to make assurance doubly sure, I omitted its use for several times, when the discharges would invariably return. I concluded that the common salt had saved my patient's life, and at this time I entertain not the slightest doubt about it.

So well pleased was I with the result that I subsequently used it in 17 cases, all with the like decided and beneficial results. There were no unpleasant symptoms—neither nausea, thirst, or anything else, save that it acted like a charm in every instance, and I saved every one of my patients.

Now, I do not know whether any other physician has tried the article in like cases or not, but I would strongly advise them to do so. Shut in as we have been, until recently, we could not tell what was going on outside in the moral world, nor what discoveries have been made in medicine; but I do not recollect ever to have heard of common salt being used in fevers of any kind. I should be happy to know that other physicians have tested it. I often, in the year '61, gave it in advance of the ulceration, and in every case it controlled and prevented it. Indeed, I thought at the time that I had made a

most valuable as well as wonderful discovery, for I used it in so many instances, and proved it, that I have no doubt whatever that it saved life where nothing else would have done it. It must not, of course, be understood that it was the sole remedy used in those cases, for I gave tonics, alteratives, opiates, terebentha, etc., etc., but nothing would control the ulceration but the salt, and that did it to perfection.

Yours very truly,

LUTHER C. WHITE, M.D.

Proceedings of Societies.

ALUMNI ASSOCIATION OF CHICAGO MEDICAL COLLEGE.

The following correspondence explains itself.—[Ed.

S. A. MCWILLIAMS, M.D., *Secretary Alumni Association Chicago Medical College.*

My Dear Doctor: Herewith I have the honor of transmitting you the official reports of the preliminary meeting, and of the meeting of organization, of the *Alumni Association of the Chicago Medical College*, together with the Constitution and By-Laws of the *Association* as adopted.

I am, Doctor, Your Obed't Serv't,

FRANK W. REILLY, M.D.

71 Hanover Street, *March 7th, 1867.*

MINUTES OF A MEETING OF GRADUATES OF THE CHICAGO MEDICAL COLLEGE, HELD AT DR. DAVIS' OFFICE, SATURDAY EVENING, MARCH 2d, 1867.

Present—Drs. J. S. Jewell and John M. Woodworth, Faculty Chicago Medical College; Drs. N. W. Webber, John Quirk, Hiram Wanzer, Robert S. Addison, Julien S. Sherman, and Frank W. Reilly.

Dr. Jewell briefly explained the object of the meeting to be the organization of the Alumni of the Chicago Medical College into an association for the encouragement of goodfellowship

and mutual benefit, the cultivation of a closer intimacy and stronger bonds between the common children of one Alma Mater, and, generally, the advancement of our professional interests by a formal union, holding regular meetings, correspondence and the other usual agencies of organized bodies.

On motion of Dr. Reilly, Dr. Jewell was called to preside over the meeting, and, on Dr. Woodworth's motion, Dr. Reilly was requested to act as Secretary.

On taking the chair, Dr. Jewell stated that the views and suggestions of members on the plan of organization, its aim and scope would be in order, and, after a general and informal discussion, Dr. Addison moved a committee be appointed by the Chair to draft a Constitution and By-Laws.

The Chairman appointed Drs. Woodworth, Webber, and Sherman, with instructions to be prepared to report their action at an adjourned meeting.

Dr. Jewell presented a draft of Constitution and By-Laws, which, after a reading, was placed in the hands of the above committee.

Dr. Jewell called Dr. Sherman to the chair.

The Secretary read, by request, the draft of a Constitution and By-Laws prepared by Dr. Woodworth, which draft was also referred to the committee.

On motion of Dr. Woodworth, Dr. Jewell was added to the committee on Constitution and By-Laws.

On motion, the meeting adjourned to meet in the upper lecture-room at the close of the commencement exercises on Tuesday, March 5th.

FRANK W. REILLY, M.D., *Secretary.*

MINUTES OF THE MEETING OF ORGANIZATION.

CHICAGO MEDICAL COLLEGE, }
Tuesday, March 5th, 1867. }

Present—Drs. Jewell and Woodworth, of the Faculty; Drs. Sherman, Webber, Merriman, Quirk, McWilliams, Reilly, Sheffield, Martin, Reckard, Robertson, Patton, Park, Parmenter, Didlake, Crocker, Oggel, Palmer, Nichols, Fredigke, Resse-

guie, Buchtel, Twining, Bond, Baker, Hussey, Lane, Eppler, Hutchinson, Bobb.

Dr. JEWELL called the meeting to order; the Secretary read the minutes of the previous meeting, which were adopted, and the committee on Constitution and By-Laws submitted the following:—

CONSTITUTION AND BY-LAWS OF THE ALUMNI ASSOCIATION
OF THE CHICAGO MEDICAL COLLEGE.

CONSTITUTION.

I. This association shall be known as the "Alumni Association of the Chicago Medical College," and include, as members, all ordinary graduates of said college who shall make application for such purpose to the Secretary in writing, and pay the usual fees to the Treasurer.

All persons who have received the *honorary* or *ad eundem* degree shall be known as associate members, and shall be entitled to all the privileges of the association, except the right of voting and holding office.

II. The objects of this association shall be to keep alive and perpetuate that kindly and cordial feeling which binds us together by reason of our common *Alma Mater*; to encourage the interchange of professional experience, and keep alive that ardor among those who are identified with their *Alma Mater* in attempting to elevate the standard of medical education; and likewise to secure to the institution a record of the professional history of its alumni.

To this end, each member will be expected to address a letter to the Secretary on or before the 15th day of February of each year, giving a short history of his professional experience during the preceding year; and stating at length anything of special interest that may have come under his observation.

III. The officers of this association shall be a President and two Vice-Presidents, a Secretary and Treasurer. The officers shall be chosen by ballot, at each regular annual meeting, and shall hold office until their successors are duly elected.

IV. Any member may be expelled for cause, or be removed from office, after due hearing, by a two-thirds vote of the members present, at any regular meeting.

V. Every proposition to alter or amend the constitution shall be submitted in writing; a two-thirds vote of the members present being necessary to the adoption of such measure.

BY-LAWS.

I. The regular annual meeting of this association shall be held on the first Monday in March of each year. Special meetings may be called by the President, or by a Vice-President in the absence of the President.

II. The President shall preside at all the meetings of the association, and call such special meetings as he may deem necessary, or as he may be requested to call by any five members. Ten members shall constitute a quorum.

III. The Vice-President shall perform the duties of the President in case of his absence.

IV. The Secretary shall keep the records of the association; shall keep a correct list of the members, together with the date of their graduation, and Post-Office addresses. He shall also have charge of the correspondence, and shall make a report, at the annual meeting, of all communications received by him. He shall likewise collect and act as custodian of all catalogues, pamphlets, etc., relating to the history of the Chicago Medical College, and preserve copies of such original contributions to medical knowledge as may be contributed by members of the association.

V. The Treasurer shall have charge of the funds, and pay all bills authorized by a written order of the President, or, in case of his absence, by one of the Vice-Presidents; and shall render a written report at each annual meeting.

VI. Every member shall pay into the hands of the Treasurer the sum of one dollar annually.

VII. The order of business at meetings shall be as follows:—

Calling roll of members.

Reading minutes of previous meeting.

Report of committees.

Correspondence.

Deferred business.

New business.

Reading and discussion of papers.

Address.

VIII. The By-Laws may be altered or amended in the same manner as provided for in the Constitution.

The Constitution and By-Laws were unanimously adopted, the committee discharged, and, on motion, the meeting resolved itself into the ALUMNI ASSOCIATION OF THE CHICAGO MEDICAL COLLEGE.

The Chairman appointed a committee, consisting of Drs. Woodworth, Merriman, and Sheffield, to nominate officers, which committee, after a brief conference, presented the following nominations :—

President—J. S. JEWELL, M.D., Professor of Anatomy Chi. Med. College.

1st Vice-President—S. L. FULLER, M.D., Appleton, Wis.

2d Vice-President—D. J. HUSSEY, M.D., Cherry Valley, Ill.

Secretary—S. A. MCWILLIAMS, M.D., Chicago.

Treasurer—JULIEN S. SHERMAN, M.D., Chicago.

On being duly balloted for the above gentlemen were unanimously elected, and the President, on taking his seat, made a brief address.

On motion, it was ordered that the proceedings of the preliminary meetings, together with the Constitution and By-Laws, be furnished the *Chicago Medical Examiner* for publication; and the Secretary was further instructed to issue a formal invitation, through the *Examiner*, to all graduates of the Chicago Medical College, to become members of the *Alumni Association*.

The President announced that the Constitution and By-Laws would be found at the residence of Dr. Davis, in the evening, awaiting the signatures of members; and the Treasurer announced his readiness to receive the dues of members forthwith.

Adjourned.

FRANK W. REILLY, M.D.,
Sec'y Meeting of Organization.

CHICAGO COLLEGE OF PHARMACY.

A very great interest is just now being manifested among the druggists of the City with reference to this still living, but almost forgotten, institution. The College has recently been the recipient of a costly and extensive collection of chemical specimens, the gift of Messrs. POWERS & WEIGHTMAN, the well-known manufacturing chemists of Philadelphia.

The inspection of these specimens was made the occasion of an informal meeting last Wednesday afternoon. From the remarks made by the President, Mr. E. H. SARGENT, it appears that, besides chairs, cases for specimens, etc., the College is in possession also of quite a variety of specimens of *materia medica*, to which additions have been promised as soon as the College is in proper condition to receive them. These, with the valuable collection above referred to, constitute an ample basis upon which to build up a cabinet that will be an honor to the name and fame of our City.

It is proposed also, to organize a library, to contain the best works on pharmacy and the collateral sciences. It is not considered best to attempt a course of lectures at present, or until the College has become strong enough to make them successful beyond a doubt. The surplus funds will be used in procuring books, specimens, etc. At the conclusion of the President's remarks, Messrs BUCK, SWEET, and EHRLMAN were appointed a committee to nominate officers. The following were reported and elected:—

President—Mr. E. H. SARGENT.

Vice-Presidents—Messrs GEORGE BUCK and W. H. MULLER.

Secretary—Mr. JAMES W. MILL.

Treasurer—Mr. J. P. SHARP.

Trustees—ALBERT E. EBERT, HENRY SWEET, JOHN W. EHRLMAN, WILLIAM REINBOLD, and EMIL DREIER.

Messrs WHITFIELD, EHRLMAN, and BLOCKI were then appointed a special committee to secure permanent rooms for the meetings of the College. At this stage of the proceedings, a member of the profession from Leavenworth, Kansas, was in-

troduced to the meeting by Mr. EBERT, and, on motion, unanimously elected an associate member.

The large attendance, the enthusiastic and hopeful spirit manifested at this meeting, augur well for the future success of the College. The other large cities of the Union—Philadelphia, New York, Boston, Baltimore, Cincinnati, and St. Louis—have their Colleges of Pharmacy. Why not Chicago? Let the druggists of Chicago have regard to their reputation for intelligence and enterprise, and see to it that the impetus thus given to their College does not fail, from any supineness or indifference on their part, to carry it forward to a high position of usefulness and honor. It is to be hoped that not only the druggists of the City, but many, also, throughout the Northwest, will feel sufficient interest to identify themselves with the College, either as active or associate members. Copies of the constitution and by-laws can be had on application to the Secretary, JAMES W. MILL, 119 West Adams Street.

The regular monthly meeting of the Chicago College of Pharmacy was held on the afternoon of March 4th, 1867, in Room No. 20, Rice's Building, the President, E. H. SARGENT, in the chair. A large attendance of members present.

The minutes of the previous evening were read and approved.

The Committee on Renting Rooms reported that they had secured a desirable suite of rooms in Rice's Block, and that the same would be suitably furnished as soon as possible.

On motion, a committee was appointed to prepare a design for certificates of membership to be issued to each member of the College, as provided for in the by-laws.

On motion, standing committees were appointed on the progress of Pharmacy and the revision of Pharmacopœia; and, also, a temporary committee on the solicitation of specimens for the College.

The Secretary was on motion instructed to notify the different organizations throughout the Country of the reorganization of the Chicago College of Pharmacy.

Several contributions to the library were reported by Mr.

A. E. EBERT, and a vote of thanks was tendered to him for his donations.

M. EBERT read a paper on the preparation of Bibromide of Mercury, and on a substitute for Liebig's food for infants, made from wheat bran. The subject was fully discussed by the members present.

The meeting then adjourned to meet on Monday, March 18th, 1867.

J. W. MILL, *Secretary.*

Druggists throughout the North-west are earnestly invited to become members, and to contribute to the cabinet and library of the College.

Book Notices.

On the Action of Medicines in the System. By FREDERICK WILLIAM HEADLAND, M.D., B.A., F.L.S., Fellow of the Royal College of Physicians, etc., etc. Fifth American, from the Fourth London, Edition, revised and enlarged. Philadelphia: LINDSAY & BLAKISTON. 1867.

This new edition of a most valuable work is published in good style, on plain, fair type, and contains 431 pages. The former editions have been so long before the profession, and so extensively read, that their merits are well known. The work is worthy of a place in the library of every practicing physician. For sale by W. B. KEEN & Co., 148 Lake St. Price \$3.

Orthopedics: A Systematic Treatise upon the Prevention and Correction of Deformities. By DAVID PRINCE, M.D. Philadelphia: LINDSAY & BLAKISTON. 1866.

In the preceding issue of the EXAMINER, we mentioned the fact that no copy of this work had been sent to us, but inserted in the same number a notice of its merits, furnished by a friend. Since that time, we have received a copy from the publishers, and find it an elegant volume of 240 pages, well illustrated with cuts. It is a good, practical, and reliable work, exactly

such as every practitioner needs. For sale by W. B. KEEN & Co., 148 Lake St. Price \$3.00.

Contributions to the Pathology, Diagnosis, and Treatment of Angular Curvature of the Spine. By BENJAMIN LEE, M.D. Philadelphia: J. B. LIPPINCOTT & Co. 1867. pp. 129.

This little volume is neatly printed, but without an index or table of contents. It is made up of four interesting essays or articles, originally published in the *Medical Times*, of New York, and styled as follows:—1st, Initial Gastralgia. 2d, False Views. 3d, Correct Principles. 4th, Ten Type Cases. The author writes in an easy, interesting style; and the work will amply repay a careful perusal. For sale by S. C. GRIGGS & Co., 41 Lake St. Price \$1.25.

Watson Abridged: A Synopsis of the Lectures on the Principles and Practice of Physic, delivered at King's College, London. By THOMAS WATSON, M.D., etc. (Abridged from the last English Edition,) with a concise but complete Account of the Properties, Uses, Preparations, Doses, etc., of all the Medicines mentioned in these Lectures, and with other valuable additions. By J. J. MEYLER, A.M., M.D. Philadelphia: Published by the Author. 1867. pp. 277.

This appears to be a faithful abridgement of Dr. Watson's well-known work on the Practice of Physic. It is printed on small but plain type, and supplied with such marginal headings as to facilitate references to particular topics. The author says, in his preface:—"The principal object that induced the making of this abridgement was, to afford young practitioners, who are often at a loss what to do on their first 'sick call,' and other physicians, whom numerous professional duties prevent from consulting more extended works, a convenient and expeditious means of reference in their daily rounds. Another, but no less important object, was to supply medical students, during the lecture seasons, with a ready means of reading over the various subjects treated of in his daily lecture by the Professor on Practice."

The Science and Practice of Medicine. By WILLIAM AITKEN, M.D., Edin., Prof. of Pathology in the Army Medical School; Corresponding Member of the Royal Imperial Society of Physicians of Vienna; of the Society of Medicine and Natural History of Dresden; and of the Imperial Society of Medicine of Constantinople; Late Pathologist attached to the Military Hospitals of the British Troops at Scutari; and Formerly Demonstrator of Anatomy in the University of Glasgow. In Two Volumes. From the Fourth London Edition, with Additions, by MEREDITH CLYMER, M.D., Late Professor of the Institutes and Practice of Medicine in the University of New York; Formerly Consulting Physician to the Philadelphia Hospital, etc. Philadelphia: LINDSAY & BLAKISTON. 1866. pp. 2069.

On the appearance of the first volume of the American edition of this work, we gave it a brief and commendatory notice. The second volume, comprising no less than 1114 pages, is now received from the American publishers, and completes the work. The two volumes embrace an aggregate of 2069 pages, and present the reader with a very full consideration of the science and practice of medicine as it exists at the present day. The author has not written it for the purpose of supplying a class of students with a text-book as cheaply as possible; nor as a labor-saving machine for indolent practitioners; nor yet because he had any special theories or favorite doctrines of his own to promulgate. The object of the author appears to have been, to present the profession with a full and well-digested summary of practical medicine as represented by the most eminent British writers and practitioners, not by any means, however, disregarding the medical literature of other countries. The notes and additions by the American editor, Dr. M. Clymer, are numerous and valuable. In the second volume, alone, they amount to over three hundred pages, embracing such topics as Gonorrhœal Rheumatism, Delirium of Inanition, Epileptiform Neuralgia, Auscultation, Sphygmograph, Chronic Pyæmia, Syphilitic Disease of the Liver, Addison's Disease, Cerebro-Spinal Meningitis, etc., etc. The American publishers have

executed their task well, and the work is in all respects worthy of a place in the library of every medical practitioner. For sale by W. B. KEEN & Co., 148 Lake St. Price \$12.00.

Medical Register of the District of Columbia, for 1867. Embracing Notices of the Medical, Benevolent, and Public Institutions of Washington. By J. M. TONER, M.D. BLANCHARD & MOHUN, Washington, D.C. 1867.

We are indebted to the author for a copy of this neatly executed and useful little volume. It is a duodecimo of 102 pages, and contains an amount and variety of information, which makes it interesting and valuable to all members of the profession, whether they ever intend to visit Washington or not. The author has certainly exhibited a remarkable amount of industry and skill in selecting and compressing into so small a compass so large a quantity of important and curious historical and statistical information. He deserves the thanks of the profession and a liberal patronage.

Editorial.

CONVENTION OF DELEGATES FROM MED. COLLEGES.—As indicating the importance we attach to the movement for such a convention, we copy, in place of new editorial matter, the following report of our remarks, originally furnished to the *Med. and Surg. Reporter*, of Philadelphia:—

During the past year the subject of Medical College Organization and Instruction has been discussed with more freedom than usual in some of the leading medical journals of our country, as well as at the last annual meeting of the "American Medical Association." It will be remembered by our readers that, at the meeting just named, a proposition was made to endorse the action of a convention previously held in Cincinnati, composed of delegates from several medical colleges in the West and North-west, which had recommended a more

uniform rate of lecture fees, and the extension of the annual lecture term to six months. The discussion that followed this proposition was participated in by Drs. D. H. Storer, of Boston; M. B. Wright, of Cincinnati; Worthington Hooker, of New Haven; N. S. Davis, of Chicago; and others.

It was claimed by the last named gentleman that the evils connected with our present system of medical education could not be remedied by simply lengthening the annual lecture terms and adopting any given rate of lecture fees.

However proper these measures might be, their influence would not reach the real source of most of the evils of which the Profession complain—namely, the graduation and admission into the ranks of the Profession of young men whose general education, mental discipline, and medical attainments are all extremely defective. These result, not from the rate of lecture fees, or the length of the lecture terms in our medical schools, but from the three following sources: First, the entire absence of all provision for securing any standard of preliminary education before entering upon the study of medicine. Second, the equally entire absence of all provision for securing a proper method and order of progress in the study of medicine itself. And third, the shortness of the lecture terms, and the insufficient means for clinical instruction in many of the schools. He represented the two first as *radical faults*, entering into the very foundation of our present system of medical college instruction, and vitiating all its practical results. They were violations of the most important principles, universally recognized in all other departments of education, in this and in all other civilized countries.

If a young man applies for admission to any literary college, or even high school, he is straightway subjected to an examination, sufficient to test his knowledge of the elementary branches of learning. And why? Simply because it is assumed, on the plainest principles of common sense, that a knowledge of the elementary branches is essential to a proper understanding of the higher and more intricate. It is assumed that a knowledge of arithmetic, grammar, geography, etc., must prepare the

way for the higher mathematics, philosophy, history, rhetoric, etc.; and that a certain degree of mental discipline and habits of study are necessary to enable the student to make adequate advancement in his collegiate course.

In our present system of medical education all this is ignored, and whoever presents himself with the required fee is admitted to our medical colleges, without an inquiry as to whether his mind has been disciplined by an hour of previous study, or whether he is capable of constructing two sentences grammatically, or not.

The absence of any provision for securing a proper method and progressive order of study after entering the medical colleges, develops evils equally palpable and mischievous. It bewilders the student by crowding daily upon his mind too great a variety of subjects, and by presenting them in a perfectly heterogeneous order; while it strongly encourages superficiality of attainments, and constant efforts to comprehend the practical departments to the neglect of the more elementary. If the faculty of any of our literary colleges should throw their freshmen, sophomore, junior, and senior classes all into one grand class, and undertake to drill them one hour on some study belonging to the freshmen year, the next hour on one belonging to the senior year, the third hour on one belonging to the sophomore year, and so on, all the world would regard them as better fitted for a lunatic asylum than for teachers of youth. And yet, this would be exactly parallel to what is done, with one exception, in all the medical colleges in our country. The student just commencing his professional study, and not yet familiar with the naked bones of the skeleton, is placed side by side with the one who has studied two, three, or four years, and both listening during each day to lectures on histology, the elements of chemistry, physiology, and *materia medica*, interspersed with those on the details of practical medicine, surgery, and obstetrics.

The attempt to include an adequate course of instruction in the various branches of medical science, in five or six lectures per day, for sixteen or eighteen weeks, is not much less objec-

tionable than the heterogeneous order in which the instruction is given.

He stated that nothing short of a full and careful revision of the whole system of Medical College education, could remove the foregoing defects. Such revision should be founded upon the following fundamental propositions:—

1st. A fair degree of general education and mental discipline is necessary to enable any young man to study medicine understandingly.

2d. A knowledge of the elementary branches of medicine, such as Anatomy, Physiology, etc., is essential as a preparatory step to the profitable study of Practical Medicine, Surgery, etc. Hence, a successive order of study is as necessary in the study of medicine as in general science.

3rd. The number of Professorships, and the length of the annual term in each college, should be such as to ensure a complete discussion or review of all the legitimate branches of medical science.

To place the system of medical college instruction in our country upon these self-evident propositions would require the universal adoption and enforcement of a reasonable standard of preliminary education for the medical student; the division of the whole subject of medical science into about twelve branches, *four* of which should be assigned in proper order to each of the three years required for medical study; the requirement of three courses of lectures instead of two, with a thorough examination of the student, at the close of each course, on those branches belonging to each year successively, and an increase of professorships in each college, corresponding with the whole number of branches to be taught, with an annual lecture term of not less than five full calendar months. To perfect and carry into practical operation a revision of our system of medical education, so important to the honor and usefulness of the profession, requires a free interchange of views and an honest concert of action among those connected with the medical colleges throughout the whole country. It cannot be accomplished by resolving here in this association that the college fees ought to be uni-

form, or that the annual lecture terms ought to be five, six, or seven months.

The speaker reminded the members of the association that almost every volume of their transactions, for the last sixteen years, contained resolutions of the same import as those now under discussion. If anything of practical value was accomplished it would have to be done by the college faculties themselves. He, therefore, moved, as a substitute for the resolutions under discussion, the following resolution:

"Resolved, That this Association earnestly requests the Medical Colleges of the country, to hold a convention for the purpose of thoroughly revising the present system of Medical College instruction, and that a committee be appointed to aid in carrying this resolution into effect."

PUBLIC COMMENCEMENT OF CHICAGO MEDICAL COLLEGE.—The commencement exercises of this institution were held on the 4th and 5th of March. The afternoon of the first day was occupied by reading Theses by some of the candidates for graduation, and the public examination of all the candidates in class. At 3 o'clock P. M., of the second day, the college hall was well filled with an appreciative audience. The exercises were opened with prayer by the Rev. Dr. R. M. Hatfield, of Chicago. The President of the Faculty, Prof. N. S. Davis, after stating briefly the peculiarities in the organization of the college, and the important educational advantages they were designed to afford, had the Secretary call the list of junior students who had undergone examinations in those branches of medical science embraced in the junior course, and delivered to each of them a certificate indicating their progress, accompanied by a few words of earnest exhortation, continued diligence and fidelity in the further prosecution of their professional studies.

The Secretary then called the list of candidates for graduation as follows:

E. F. Baker, John W. Barlow, Thomas S. Bond, Charles E. Crocker, John T. Curtiss, M. T. Didlake, Peter Epler, John G.

Fredighe, David J. Hussey, J. W. Hutchinson, Isaac R. Lane, Elmer T. Lawrence, Wm. Martin, Theron Nichols, Henry P. Oggel, Thomas D. Palmer, Wesley Park, J. A. Parmenter, D. Patton, F. A. Richards, Chester Reeder, R. R. Resseque, David Robertston, W. L. Secumb, D. A. Sheffield, E. T. Twinning, M. L. Whitman, John Whelan, and the President conferred upon each the degree of Doctor of Medicine, accompanied by an impressive charge in relation to the privileges conferred upon them, and the duties and responsibilities they had assumed.

It was then announced that the Honorary Degree of Doctor of Medicine had been conferred upon Drs. D. W. Beebee, of Elizabeth, Ill.; Asher Goslin, of Olney, Ill.; Wm. Law, of Shullsburg, Wis.; N. Holton, of Buda, Ill., and Joseph P. Johnston, of Lynnville, Ill.

It was also announced that the Committee of the Faculty, to whom had been referred the Inaugural Theses, had awarded the premium for the best Thesis to John G. Fredighe, of Chicago, and for the second best to Theron Nichols, of Wisconsin.

R. S. Patterson, M.D., Professor of Medical Jurisprudence, was then introduced to the audience, and delivered an appropriate and highly interesting valedictory address.

Notice was given that the Summer Reading and Clinical Term in the College would commence on the second Monday in March and continue until the first Monday in July.

The exercises were closed with a benediction by Rev. Dr. Hatfield.

In the evening the graduates, students, and alumni of the College, the Faculty, and members of the Chicago Medical Society, enjoyed a very pleasant social entertainment at the residence of the President of the College.

ALUMNI ASSOCIATION.—Under the head of Proceedings of Medical Societies, in this number of the *EXAMINER*, will be found an account of the formation of the "Alumni Association of Chicago Medical College," with its Constitution and By-Laws. We invite to this the special attention of all the graduates of the college since its organization in 1859, and

hope all who are now living will promptly respond to the invitation to become members of the Association.

Such an organization not merely tends to perpetuate friendship, social intercourse, and unity of feeling among the alumni of a common Alma Mater, but it is equally efficient in keeping alive a generous emulation in the pursuit of knowledge, in the attainment of professional eminence, and the maintenance of professional honor. And we can assure the alumni who may unite with the Association, that their Alma Mater will open wide its doors to welcome them at each returning anniversary meeting.

AMERICAN MEDICAL ASSOCIATION.

OFFICE OF PERMANENT-SECRETARY,

WM. B. ATKINSON, M.D.,

215 Spruce St., Philada.

The Eighteenth Annual Meeting of the American Medical Association will be held in Cincinnati, on Tuesday, May 7th, 1867, at 11 o'clock A.M.

The following Committees are expected to report:—

On Quarantine, Dr. Wilson Jewell, Pa., Chairman.

On Ligature of Subclavian Artery, Dr. Williard Parker, N.Y., Chairman.

On Progress of Medical Science, Dr. Jerome C. Smith, N.Y., Chairman.

On the Comparative Value of Life in City and Country, Dr. Edward Jarvis, Mass., Chairman.

On Drainage and Sewerage of Cities, &c., Dr. Wilson Jewell, Pa., Chairman.

On the Use of Plaster of Paris in Surgery, Dr. Jas. L. Little, N.Y., Chairman.

On Prize Essays, Dr. F. Donaldson, Md., Chairman.

On Medical Education, Dr. S. D. Gross, Pa., Chairman.

On Medical Literature, Dr. A. C. Post, N.Y., Chairman.

On Instruction in Medical Colleges, Dr. Nathan S. Davis, Ill., Chairman.

On Rank of Medical Men in the Army, Dr. D. H. Storer, Mass., Chairman.

- On Rank of Medical Men in the Navy, Dr. W. M. Wood, U.S.N., Chairman.
- On Insanity, Dr. Isaac Ray, R.I., Chairman.
- On American Medical Necrology, Dr. C. C. Cox, Md., Chairman.
- On the Causes of Epidemics, Dr. Thomas Antisell, D.C., Chairman.
- On Compulsory Vaccination, Dr. A. N. Bell, N.Y., Chairman.
- On Leakage of Gas-Pipes, Dr. J. C. Draper, N.Y., Chairman.
- On Alcohol and its Relations to Man, Dr. J. R. W. Dunbar, Md., Chairman.
- On the Various Surgical Operations for the Relief of Defective Vision, Dr. M. A. Pallen, Mo., Chairman.
- On Local Anæsthesia, Dr. E. Krackowitz, N.Y., Chairman.
- On the Influence upon Vision of the Abnormal Conditions of the Muscular Apparatus of the Eye, Dr. H. D. Noyes, N.Y., Chairman.
- On the Comparative Merits of the Different Operations for the Extraction of Vesical Calculi, Dr. B. J. Raphael, N.Y., Chairman.
- On the Therapeutics of Inhalation, Dr. J. Solis Cohen, Pa., Chairman.
- On the Deleterious Articles used in Dentistry, Dr. Augustus Mason, Mass., Chairman.
- On Medical Ethics, Dr. Worthington Hooker, Con., Chairman.
- On the Climatology and Epidemics of Maine, Dr. J. C. Weston.
- of New Hampshire, Dr. P. A. Stockpole.
- Vermont, Dr. Henry Janes.
- Massachusetts, Dr. Alfred C. Garratt.
- Rhode Island, Dr. C. W. Parsons.
- Connecticut, Dr. B. H. Catlin.
- New York, Dr. E. M. Chapman.
- New Jersey, Dr. Ezra M. Hunt.
- Pennsylvania, Dr. D. F. Condie.
- Delaware, Dr. — Wood.
- Maryland, Dr. O. S. Mahon.
- Georgia, Dr. Juriah Harriss.
- Missouri, Dr. Geo. Engelman.
- Alabama, Dr. R. Miller.
- Texas, Dr. Greenville Dowell.
- Illinois, Dr. R. C. Hamil.

Indiana, Dr. J. F. Hibberd.
 District of Columbia, Dr. T. Antisell.
 Iowa, Dr. J. W. H. Baker.
 Michigan, Dr. Abm. Sager.
 Ohio, Dr. J. W. Russell.

Secretaries of all medical organizations are requested to forward lists of their Delegates as soon as elected, to the Permanent-Secretary,

W. B. ATKINSON.

MORTALITY REPORT FOR THE MONTH OF FEBRUARY.—The following is the mortuary report of Health Officer Bridges, of this City, for the month ending March 1. The total number of deaths reported is 255, which is a reduction of 44 from the number of deaths last month:—

CAUSES OF DEATH.

Accidents,-----	6	Fever, Congestive,-----	3
Asthma,-----	1	Fever, Remittent,-----	2
Abscess,-----	2	Fever, Scarlet,-----	14
Bronchitis,-----	1	Fever, Typhoid,-----	10
Cancer,-----	3	Hydrocephalus,-----	4
Cold,-----	1	Inflammation of Bowels,-----	4
Croup,-----	8	Inflammation of Brain,-----	5
Consumption,-----	42	Inflammation of Lungs,-----	19
Convulsions,-----	18	Inflammation of Stomach,-----	1
Childbed,-----	5	Inflammation not stated,-----	1
Congestion of Brain,-----	7	Killed,-----	1
Congestion of Lungs,-----	2	Marasmus,-----	2
Delirium Tremens,-----	1	Neuralgia,-----	1
Decline,-----	2	Old Age,-----	6
Diarrhoea,-----	1	Paralysis,-----	1
Diphtheria,-----	6	Pneumonia,-----	1
Dropsy,-----	9	Phthisis Pulmonalis,-----	2
Dysentery,-----	1	Rheumatism,-----	1
Disease of Brain,-----	1	Stillborn,-----	22
Disease of Bowels,-----	2	Small-Pox,-----	5
Disease of Heart,-----	4	Teething,-----	9
Disease of Liver,-----	2	Whooping-Cough,-----	1
Disease of Lungs,-----	2	Worms,-----	1
Disease of Throat,-----	1	Gun-shot Wound,-----	1
Epilepsy,-----	1	Ulcer,-----	1
Erysipelas,-----	2	Unknown,-----	6
Total,-----			255

AGES OF THE DECEASED.—Under 5 years, 118; over 5 and under 10 years, 17; over 10 and under 20, 10; over 20 and under 30, 35; over 30 and under 40, 31; over 40 and under 50, 16; over 50 and under 60, 8; over 60 and under 70, 10; over 70 and under 80, 6; over 80 and under 90, 2; unknown, 2. Total, 255.

NATIVITIES.

Chicago, -----	124	Germany, -----	30	Scotland, -----	2
Other States, -----	39	Ireland, -----	33	Wales, -----	1
Canada, -----	1	Norway, -----	3	Unknown, -----	5
England, -----	12	Nova Scotia, -----	1		
France, -----	1	Sweden, -----	3	Total, -----	255

DIVISIONS OF THE CITY.

North, 67 | South, 81 | West, 106 | Total, 255

MONEY RECEIPTS FOR EXAMINER, FROM FEB. 21ST TO MAR. 22ND.—Drs. J. H. Judson \$3, G. P. Martin 3, Brown H. Kimber 3, J. T. Curtiss 3, R. B. Treat 6, D. F. Morrow 6, H. Deming 3, Geo. R. Bibb 3, Geo. H. Scott 3, R. S. Addison 6, L. C. White 3, Wm. H. Sommers 3, M. Lindly 6, B. F. Brown 3, J. S. Sherman 3, Asahel Clark 3, S. L. Fuller 6, Jesse H. Foster 17, W. W. Duncan 4, James M. Hutchinson 3, A. A. Dunn 3.25, J. M. Larrabee 3, J. H. Reynolds 3, L. D. Tompkins 10, David B. Trimble 3, Jas. Hayton 3, R. J. Patterson 3, Andrew J. Miller 3, J. W. Lawrence 3, E. M. Blackburn 3.

CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the first Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., Professor of Principles and Practice of Medicine, and of Clinical Medicine.

W. H. BYFORD, M.D., Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., Professor of Principles and Practice of Surgery, and of Military Surgery.

F. MAHLA, Ph. D., Professor of Organic Chemistry and Toxicology.

H. A. JOHNSON, M.D., Emeritus Professor of Gen. Pathology and Public Hygiene.

J. S. JEWELL, M.D., Professor of Descriptive Anatomy.

J. H. HOLLISTER, M.D., Prof. of Gen. Pathology and Public Hygiene.

RALPH N. ISHAM, M.D., Professor of Surgical Anatomy and Operations of Surgery.

M. O. HEYDOCK, M.D., Professor of Materia Medica and Therapeutics.

F. MAHLA, Ph. D., Professor of Inorganic Chemistry.

R. J. PATTERSON, M.D., Professor of Medical Jurisprudence.

DANIEL NELSON, M.D., Lecturer on Physiology and Histology.

J. M. WOODWORTH, M.D., Demonstrator of Anatomy.

For the Winter Term, admitting to all the Lectures in the College, \$50.00

Graduation Fee, 20.00

Matriculation Fee, 5.00

Dissecting Ticket, 5.00

Hospital Ticket, 6.00

The Summer Reading and Clinical Term commences on the second Tuesday in March, and continues until the first Tuesday in July; and is free to all matriculated Students of the College. Boarding, \$3.50 to \$4.50 per week. For further information, address

E. ANDREWS, Sec'y of the Faculty.